

Prepared by
Dr. William Chapman
July 13, 1979
DCPA

CIVIL DEFENSE FOR THE 1980's--CURRENT ISSUES

ABSTRACT: This paper reviews the civil defense (CD) debate as it has been reflected since 1976 in studies, Congressional Hearings, DoD reports, journals, and other open sources (no significant facts, policies or views are classified). The paper reviews in some detail the debate on the relationship of CD to the strategic balance, and outlines the Executive Branch studies on U.S. and Soviet CD that led to Presidential Decision 41. PD 41 makes it clear that CD is a factor to be taken into account in assessing the strategic balance: The U.S. program is to "enhance deterrence and stability," and to "reduce the possibility that the Soviets could coerce us" in a crisis. The paper also assesses programs that could give effect to the PD 41 policies, and concludes that a program of the type recommended by the Secretary of Defense (averaging \$230M annually for FY's 1980-1984) could implement these policies, whereas a program at the \$100 or \$110M level cannot.

C O N T E N T S

	<u>Page</u>
Summary of Main Points.	1
Genesis of the CD Debate.	3
CD and the Doctrine of Mutual Assured Destruction (MAD)	5
CD as "Insurance"	9
U.S. Strategic Policy and CD.	9
Executive Branch Studies on CD, 1976-1978	11
Soviet Civil Defense.	12
Alternative U.S. Civil Defense Programs	13
Congressional Hearings and Testimony, 1976-1978	18
--T.K. Jones' Testimony and the Debate on Postwar Recovery .	18
--Department of Defense Testimony.	21
The CD Program Decision of the Secretary of Defense	24
Presidential Decision 41.	24
The FY 1980 Budget Request for Civil Defense.	26

Note - E.O. July 15, 1979 transferred
DCPA to FEMA
(E.O. 12148)

	<u>Page</u>
The January 1979 Proxmire Hearings.	28
--The ACDA Study on Civil Defense.	28
--DCPA Study on Postattack Recovery.	31
--Civil Defense and the Strategic Equation	33
--Civil Defense and the Credibility of Deterrence.	34
--Civil Defense and Crisis Coercion.	36
--Crisis Evacuation and Crisis Stability	36
--Would Civil Defense Increase U.S. Willingness to Take Risks?	37
--Views on U.S. Civil Defense.	38
Civil Defense and the Strategic Balance--A Recapitulation and Assessment	39
--Uncertainties.	40
--Catastrophic Failures of Judgment in the Twentieth Century	41
--Churchill's Views on Crises.	42
--July, 1914: The Environment of Crisis Decision-Making . .	42
--Perils of the Eighties: Views of Dr. Huntington, Gen. Goodpaster, and Dr. Kissinger	43
--Civil Defense and the U.S.-Soviet Strategic Balance. . . .	45
--Presidential Decision 41	47
Civil Defense and the Cuban Crisis.	47
Congressional Action on the FY 1980 Budget.	48
What Civil Defense Can \$100M Buy?	51
--"Paper Plans Only" for Crisis Relocation	51
--"Paper Plans Only" and PD 41	52
FY 1981--Options for FEMA	53
Public Opinion, Civil Defense, and Crises	55
--The Berlin and Cuban Crises.	56
--Civil Defense in Possible Future Crises.	57
Summary	58
* * *	
A Postscript on Two Ancillary Issues: Civil Defense and SALT, and "Dual-Use"	58

	<u>Page</u>
--Civil Defense and SALT	59
--SALT and Soviet Views on Assured Vulnerability	61
--"Dual-Use" Issues.	63

Figure 1. Comparison of Effectiveness and Cost of CD Programs. . 14

Annex "A" -- Arguments Against Civil Defense and a Rebuttal

July 13, 1979

Civil Defense for the 1980's--Current Issues

This paper outlines civil defense issues, the current status of U.S. civil defense (CD)^{1/} and options for the future, as of the time when responsibility for CD is being transferred from the Secretary of Defense to the Director of FEMA. The paper outlines the issues informally and as plainly and candidly as possible. There are essentially no facts, policies, views, or opinions bearing on CD issues that are classified--all that are of any consequence are in the public record, and the principal sources are cited in footnotes to this paper.

Summary of Main Points

The salient points concerning CD in mid-1979 are not complex:

- (1) Since 1976, both U.S. and Soviet CD have received considerable media attention, and have been the subject both of some political interest and of several studies within the Federal Government.
- (2) The study of Soviet CD shows, among other things, that the USSR spends about 20 times as much for CD as the U.S. (at least \$2 billion annually vs. \$100 million).
- (3) The studies are to the effect that in a large-scale nuclear exchange:
 - Soviet survival would total some 90 percent of their population, or possibly more, provided they had a week or so to evacuate their cities and develop fallout protection for evacuees.
 - U.S. survival, given current (marginal) CD capabilities, and assuming a week or so of crisis to improve readiness, would total about 40 to 45 percent of the population now--declining to about 30 to 35 percent by the mid-1980's, as the number of Soviet weapons increases (under SALT II constraints).
 - Both countries would suffer great industrial damage.
- (4) The current marginal status of U.S. civil defense results in part from the doctrine of Mutual Assured Destruction (MAD), which holds that (mutual) vulnerability is a virtue, as

^{1/}The term "civil defense" is used in this paper as defined in the Federal Civil Defense Act of 1950, as amended (50 USC App. 2251-2297): Measures for the protection of life and property against enemy attack. Not included are other FEMA responsibilities related to national security, such as continuity of government, resource mobilization, or readiness for postattack recovery.

it assures that both sides will be deterred from nuclear war. (The Chairman of the Joint Chiefs of Staff has noted that for the U.S., the 1972 ABM Treaty was ". . . based primarily on a philosophy of mutual vulnerability to retaliatory attack.") The Soviets, by contrast, have never seen vulnerability as desirable.

- (5) Based on the recent studies, both program and policy decisions were made in 1978.
- (6) The Secretary of Defense recommended a program stressing crisis evacuation which, given at least a week in which evacuation plans were executed and other preparations made, could result in survival of about 80 percent of the U.S. population under a heavy, mid-1980's attack. Annual costs would average about \$230 million in FY's 1980 through 1984 (FY 1979 dollars).
- (7) Presidential Decision (PD) 41, September 1978, established new policies for U.S. civil defense: that it should "enhance deterrence and stability and. . . reduce the possibility that the Soviets could coerce us in times of increased tension," and "include planning for population relocation during times of international crisis." The PD 41 policies are in marked contrast to previous rationales for CD, dating from 1961, which were to the effect that the program should provide "insurance" in the unlikely event of a failure of deterrence.
- (8) The FY 1980 budget request for CD was for \$108M (rather than the \$138 to \$145M reportedly recommended by the Secretary of Defense). The request was presented as a first step towards implementing President Carter's policy and Secretary Brown's program decisions, in a year of great fiscal stringency.
- (9) The House Appropriations Committee recommended \$100M for FY 1980, and on June 22, 1979, the House rejected an attempt to amend this to \$138M. It is likely that the final appropriation will be \$100M, which in constant dollars would be the lowest funding for CD since the start of the program in 1951.
- (10) A CD program at the \$100M level cannot provide any meaningful "insurance," let alone contribute at all to the strategic balance--enhancing deterrence and stability, or reducing the possibility that the Soviets could coerce us during a crisis. In short, a \$100M program sets at naught the PD 41 policies.
- (11) Public opinion regarding civil defense is passive but when asked, the public approve CD at "consensus" levels--80 percent or higher--even though they have rather more pessimistic views as to the effectiveness of CD than government studies suggest. Moreover, the public believe that their governments are "taking

care of" CD. It is thus clear that there will never be any public outcry for CD in normal times--but also that if a frightening crisis should reveal the current low level of preparedness, the public (and undoubtedly the Congress) would demand to know why more had not been done.

- (12) The issue for FEMA is accordingly whether to recommend a substantial increase for FY 1981, to begin the program approved by the Secretary of Defense, a year later than planned. Continuing nominal funding will not permit implementing the PD 41 policies.

Genesis of the CD Debate

Until 1976, concern over Soviet as contrasted to U.S. population vulnerability was limited to those interested in civil defense. In 1970, Professor Eugene Wigner (a Nobel laureate physicist) published in a civil defense journal an article which estimated that given execution of their evacuation plans, the Soviets might lose as few as 5.5 million lives to U.S. retaliation, which led him to conclude that assured destruction was a myth.^{2/} In 1972, the same journal published an article titled "Six and Sixty," estimating that in a large-scale nuclear exchange the USSR would suffer six percent fatalities vs. sixty percent for the U.S.^{3/}

The debate did not go public, however, until January 1976 when Paul Nitze raised the issue in his article in Foreign Affairs, "Assuring Strategic Stability in an Era of Détente." He noted that the U.S. had only "the most minute preparations" as contrasted to a "massive and meticulously planned" Soviet effort. He contended that:

[A]s the Soviet civil defense program becomes more effective it tends to destabilize the deterrent relationship. . . .

. . . [T]he absence of a U.S. capability to protect its own population gives the Soviet Union an asymmetrical possibility of holding the U.S. population as hostage to deter retaliation following a Soviet attack on U.S. forces. (Emphasis added.)^{4/}

In April 1976, Professor Leon Gouré--a Soviet expert who since 1961 had devoted considerable attention to their civil defense program--published his second book on the subject. In the foreword, former Ambassador to

^{2/}"The Myth of Assured Destruction," 3 Survive 2 (July-August, 1970).

^{3/}"Six and Sixty," 5 Survive 11 (May-June, 1972).

^{4/}Nitze, Paul H., "Assuring Strategic Stability in an Era of Détente," 54 Foreign Affairs 207 at 223 and 227 (January, 1976).

the USSR Foy Kohler wrote:

Soviet civil defense measures. . . have consistently been treated [by the U.S.]. . . as an essentially insignificant consideration. Now we are finding that they may well be decisive, and that the whole foundation of the U.S. deterrence posture is crumbling.^{5/}

In the book, Gouré addressed the credibility of deterrence in light of a nation's preparedness for survival:

[Soviet spokesmen] contend . . . that no country can rationally and credibly threaten nuclear war if it accepts that such a war would be suicidal. Thus, the credibility of deterrence in the nuclear age depends not only on a country's strategic offensive capability but also on its ability to convince itself, and especially its enemy, that it can survive a nuclear war and, therefore, that it can rationally threaten to resort to war if this proves necessary.^{6/}

Lt. General Daniel Graham, former Director of the Defense Intelligence Agency, outlined in a May 1976 press interview what was called a "dread scenario":

It is something that can happen today. . . . The scenario starts when I receive intelligence reports that the Russians are evacuating their major cities. Soon a message from Moscow comes to the President [and] . . . points out that Soviet civilians have dispersed and in the event of a nuclear war, Russian losses will be 10 million persons or less, compared with 100 million in the United States. . . . It might add that isn't a bluff because Russia lost 20 million people during World War II and 10 million isn't considered a big loss to the Soviets.^{7/}

By something of a coincidence, the House Committee on Armed Services had scheduled hearings on civil defense in early 1976. The Department of Defense had requested \$123M for FY 1977, a substantial increase over the FY 1976 appropriation of \$85M, resulting from an "Issue Paper" considered by the Secretary of Defense.

OMB, however, had proposed reducing the budget to \$40M, but finally allowed \$71M. OMB also directed that DCPA financial assistance to State and local governments be limited to developing attack preparedness, and not preparedness for peacetime disasters, on the basis that the latter was not a Federal responsibility. This had also been the rationale for the budget reduction, notwithstanding a 1972 Presidential decision that

^{5/}Gouré, Leon, War Survival in Soviet Strategy: USSR Civil Defense, Miami, Florida, University of Miami, 1976 at xiv.

^{6/}Id. at 6, with further discussion at 48.

^{7/}Detroit News, May 7, 1976, p. 5B.

the U.S. should maintain the "current overall level of effort in its civil defense activities" and that there should be "increased emphasis on dual-use plans, procedures and preparedness within the limitations of existing authority." The "attack-preparedness only" direction, combined with the cut in funds, provoked sharp protest from State and local CD directors, which was a substantial factor in the Congressional decision to schedule hearings.

The hearings were chaired by Representative Leggett (California), the other member of the panel being Representative Donald Mitchell (N.Y.) The panel heard testimony from Paul Nitze, Leon Gouré, Eugene Wigner, and others in addition to witnesses from the Federal and State and local governments.

One of the witnesses was Mr. T. K. Jones of Boeing, who in 1971-1974 had been senior advisor to the DoD member of the U.S. SALT Delegation (Paul Nitze). Mr. Jones testified in detail not only on Boeing studies indicating that evacuation and shelter could hold Soviet fatalities to a low level (about 4 percent), but also on the feasibility of protecting essential manufacturing equipment by actions taken during a crisis (e.g., covering equipment with plastic sheets and then mounding earth over it, which tests have shown provides excellent blast protection.)^{8/}

In its report, the panel noted the "war-preventing" value of CD--its "role in strategic deterrence and strengthening our stance at the crisis bargaining table." It found that the program did not get enough attention from Congress, but noted that then-pending legislation (later enacted) would provide for annual authorizations--and hence hearings before the Armed Services Committees. Most important, the panel found that a "sounder policy base" for CD was needed, and recommended that the President direct the National Security Council to ". . . study the strategic significance of CD, and develop recommendations for a five-year program for upgrading CD."^{9/}

CD and the Doctrine of Mutual Assured Destruction (MAD)

It is necessary here to turn aside and discuss the doctrine of Mutual Assured Destruction (MAD), which since the mid-1960's appears to have been a factor in keeping U.S. civil defense at a nominal level. MAD holds that deterrence will be maintained so long as both sides are vulnerable, and would--and recognize that they would--suffer "unacceptable damage" should a nuclear war occur. In essence, MAD holds that both sides' population and capital wealth are and should be kept "hostage," to minimize the possibility of nuclear war--or in brief, that in vulnerability lies safety.

^{8/}House Comm. on Armed Services, Hearings, Civil Defense Review, No. 94-42, 94th Congress., 2d Session (1976) at 248-252.

^{9/}House Comm. on Armed Services, Civil Defense Review, Rep. No. 94-39, 94th Congress, 2d Session (1976) at 12.

Bizarre as this doctrine may seem to those who have not been involved in the strategic debate--even metaphysical or theological in some of its aspects or overtones--it has been of fundamental importance in U.S. decisions as to weapons procurement and deployment. For example, in January 1977, Senator Proxmire asked General George Brown, Chairman of the Joint Chiefs of Staff, to comment on a number of points made by Maj. Gen. George Keegan, Jr., the recently-retired chief of Air Force Intelligence. One of General Keegan's points was that, ". . . the 1972 antiballistic missile treaty in which the two superpowers agreed to hold each other's civilian populations hostage against nuclear attack. . . . was based on the wholly erroneous assumption that the Soviets were not seriously engaged in a major, centrally directed civil defense effort." The Chairman's comment was:

Civil defense has received little consideration during past U.S./Soviet arms control negotiations. For the United States, both the ABM Treaty and the Interim Agreement [on strategic offensive forces] were based primarily on a philosophy of mutual vulnerability to retaliatory attack. (Emphasis added.)^{10/}

It is significant that the 1972 Presidential decision on U.S. civil defense policy (to maintain the "current overall level of effort") was made shortly after the ABM treaty was signed. Keeping CD at a low level (as a "hedge") would be in keeping with a "philosophy of mutual vulnerability."

In January, 1977 the Annual Report of the Department of Defense spelled out even more clearly views and theories concerning MAD, and its relationships to CD:

In theorizing about strategic nuclear stability, some analysts have postulated that mutual vulnerability is a condition of stability--in other words, if each side offered its vulnerable population and industry as hostages to the other, neither side would dare to attack. These same analysts saw acceptance by the Soviets of this premise in their signature of the ABM Treaty of 1972. It has become equally plausible to believe that the Soviets have never really agreed to this assumption. . . . (Emphasis added.)^{11/}

The United States has never gone very far down the road of damage-limiting. Opposition to that strategy has been sharp. . . .^{12/}

In sum, U.S. policy for some years has been to avoid the development of large first-strike forces and major damage-limiting

^{10/123} Congressional Record S. 1779 at s. 1781 (daily edition January 31, 1977).

^{11/} Department of Defense, Annual Report of Secretary of Defense Donald H. Rumsfeld to the Congress, January 17, 1977 at 68.

^{12/} Id. at 77.

capabilities through active and passive defenses. Restraint in both areas, it was hoped, would demonstrate to the Soviets that the United States did not intend to threaten their capability for assured destruction, and that, accordingly, their basic security was not endangered by the U.S. deterrent posture. But such restraint cannot long be unilateral; it must be reciprocated. Any effort by the Soviets to erode the U.S. capability for assured retaliation by means of major damage-limiting measures must lead to adjustments on our part to maintain a credible deterrent. (Emphasis added.)^{13/}

A brisk debate has been carried on (and continues) in the literature, in Congress, and elsewhere as to the validity of the doctrine of Mutual Assured Destruction. On the one hand, many contend that the Soviets have never accepted the MAD philosophy; that they seek to achieve strategic superiority, and a "war-fighting" and "war-winning" posture; and that while they undoubtedly do not contemplate a surprise attack upon the U.S., their strategic posture by the mid-1980's, and their assessment of the "correlation of forces"--including as one element among many civil defense--might quite conceivably lead them to be more venturesome in a crisis, with a nuclear confrontation not unlikely to result.^{14/} Some go on to speculate that in an intense crisis, the Soviets might evacuate their cities and attack our ICBM's and bomber bases, at which point the U.S. might find it imprudent to retaliate, because the Soviet response would destroy U.S. cities and kill upwards of 100 million people, whereas the Soviets would lose only 10 million people. Our deterrent would be deterred.

Those of the opposite view contend that such speculations are alarmist at best, and that far from the Soviets rejecting MAD, the "... record indicates that the Soviet political and military leadership accepts a strategic nuclear balance between the Soviet Union and the United States as a fact, and as the probable and desirable prospect for the foreseeable future. . . . They seek to stabilize and maintain mutual deterrence."^{15/}

In January 1977, the Chairman of the Joint Chiefs stated, with regard to General Keegan's assertion that "American strategy is premised on the

^{13/}Id. at 78.

^{14/}Space does not permit citing the voluminous literature, but one primary source is Nitze, op. cit. supra note 4. See too Pipes, Richard, "Why the Soviet Union Thinks it Could Fight and Win a Nuclear War," 64 Commentary 21 (July 1977). (Professor Pipes served as Chairman of "Team B," appointed in 1976 by the President's Foreign Intelligence Advisory Board to prepare an alternative estimate of Soviet strategic objectives to the one done by the CIA.)

^{15/}Garthoff, Raymond L., "Mutual Deterrence and Strategic Arms Limitation in Soviet Policy," 3 International Security 112 (Summer 1978).

principle of war avoidance while that of the Soviet Union is premised on war winning," that:

The Joint Chiefs of Staff support the statement about the premise of Soviet military strategy. Although the Soviets seek to avoid war, preferring to attain their strategic objectives in other ways, their military doctrine is premised on the notion that war is an instrument of policy and that success in war, even nuclear war, is attainable. Soviet strategic policy and force development continue to be based on this military doctrine, which calls for capabilities to fight, survive, and win a nuclear war. A corollary of this military doctrine is observed in the Soviet emphasis on damage-limiting . . . defensive programs. (Emphasis added.)^{16/}

Thus, the civil defense debate of 1976-1979 has been conducted in the context of debate, and sharply opposed views, on much broader issues--Soviet doctrines on war-fighting and perhaps war-winning, Soviet acceptance or rejection of the doctrine of Mutual Assured Destruction, U.S. strategic weapons programs, and SALT.

Much, though by no means all, of the controversy about U.S. civil defense has been over the issue of whether CD--both U.S. and Soviet--is related to the strategic balance. Might Soviet CD--in conjunction with all other military and political factors comprising the "correlation of forces"--be a factor of any significance in tending to make the Soviets more venturesome in a crisis? Might the lack of significant U.S. civil defense be a factor in the Soviets' assessment of the correlation of forces?

If the Soviets should evacuate their cities during a crisis of unprecedented severity, while the U.S. was unable to do the same, might this place the U.S. at a disadvantage in negotiations to resolve the crisis, perhaps leading to an unfavorable crisis outcome? In 1975, Secretary of Defense Schlesinger said in his Annual Report that the U.S. should have an option for crisis evacuation for two reasons:

- (1) To be able to respond in kind if the Soviet Union attempts to intimidate us in a time of crisis by evacuating the population from its cities; and
- (2) to reduce fatalities if an attack on our cities appears imminent.^{17/}

The CD debate is thus closely related to the debate between those regarding nuclear war as essentially unthinkable, and nuclear weapons as virtually unusable for any rational purpose, and those who--while

^{16/}Op. cit. supra note 10 at S1781. In 1979, Sec/Def Brown restated DoD views on Soviet desires for capabilities with "potential of achieving victory," in Senate Comm. on Armed Services, Hearings, [DoD FY 1980 Authorization], Part 1, 96th Cong., 1st Sess. (1979) at 105-106.

^{17/}Department of Defense, Annual Report of Secretary of Defense James R. Schlesinger to the Congress, February 5, 1975 at II-54.

agreeing that deterrence of war is our paramount and overriding objective-- nevertheless contend that credible and hence effective deterrence requires an evident ability, if needs be, to fight a nuclear war. The latter group tend to think of U.S. civil defense as contributing something to deterrence, and of a crisis evacuation capability in particular as reducing the possibility of Soviet coercion of the U.S. during a crisis.

CD as "Insurance"

There is one rationale for U.S. civil defense which side-steps the controversy about the relationship of CD to the strategic balance. This is that CD is not related to deterrence, but is necessary as insurance in an uncertain world. This was in fact the policy rationale for U.S. civil defense from 1961 through September 1978, and was stated as follows by President Kennedy in 1961:

This administration has been looking hard at exactly what civil defense can and cannot do. It cannot be obtained cheaply. It cannot give an assurance of blast protection. . . . And it cannot deter a nuclear attack. . . .

But this deterrent concept assumes rational calculations by rational men. And the history of this planet, and particularly the history of the 20th century, is sufficient to remind us of the possibilities of an irrational attack, a miscalculation, an accidental war, or a war of escalation in which the stakes by each side gradually increase to the point of maximum danger which cannot be either foreseen or deterred. It is on this basis that civil defense can be readily justifiable--as insurance for the civilian population in case of an enemy miscalculation. It is insurance we trust will never be needed--but insurance which we could never forgive ourselves for foregoing in the event of catastrophe.^{18/}

A problem with the "insurance" rationale is that it says nothing about the amount or quality of the insurance coverage to be bought, or about the premium to be paid. The insurance rationale was used to justify both the FY 1962 Kennedy program (of some \$560 million in FY 1979 dollars) and the FY 1976 Nixon program of about \$104M (in FY 1979 dollars). Nor does the basic legislation say anything as to the quality or scope of protection to be developed--it says only that, "It is the policy and intent of Congress to provide a system of civil defense for the protection of life and property in the United States from enemy attack."^{19/}

U.S. Strategic Policy and CD

U.S. strategic policy has been outlined in a number of public statements over the past several years. In March 1976, the Chairman of the Joint

^{18/}President John F. Kennedy, "Urgent National Needs, A Special Message to Congress," May 25, 1961.

^{19/}50 USC App. 2251.

Chiefs said in Senate testimony:

We do not target population per se any longer. We used to. What we are doing now is targeting a war recovery capability.^{20/}

This concept of deterrence via a retaliatory threat to Soviet recovery was spelled out more fully in the January 1977 DoD Annual Report:

We believe that a substantial number of military forces and critical industries in the Soviet Union should be directly targeted, and that an important objective of the assured retaliation mission should be to retard significantly the ability of the USSR to recover from a nuclear exchange and regain the status of a 20th-century military and industrial power more rapidly than the United States. (Emphasis added.)^{21/}

U.S. strategic policy was described as follows by the Chairman of the Joint Chiefs in 1977 (and in other DoD testimony in 1978):

[M]aintaining military strength sufficient to deter attack but also, in the event deterrence fails, sufficient to provide a war-fighting capability to respond to a wide range of conflict in order to control escalation and terminate the war on terms acceptable to the United States. To the extent that escalation cannot be controlled, the U.S. objective is to maximize the resultant political, economic and military power of the United States relative to the enemy in the post-war period. (Emphasis added.)^{22/}

The U.S. objective was restated by Secretary of Defense Brown later in 1977, with a highly significant addition:

[T]he U.S. objective of maximizing the resultant political, economic, and military power of the United States relative to the enemy in a postwar period in order to preclude enemy domination continues to remain valid and achievable. (Emphasis added.)^{23/}

^{20/}Senate Comm. on the Budget, Hearings, First Concurrent Resolution on the Budget, Fiscal Year 1977, Vol. III, 94th Cong., 2d Sess. (March 1976) at 141.

^{21/}Op. cit. supra note 11 at 68.

^{22/}Op. cit. supra note 10 at S1781. Sources in 1978 include Senate Comm. on Armed Services, Hearings, Department of Defense Authorization for Appropriations for Fiscal Year 1979, Part 2, 95th Cong., 2d Sess. (1978) at 1118; id., Part 9, at 6537.

^{23/}House Comm. on Armed Services, Hearings on H.R. 8390, Supplemental Authorization for Appropriations for Fiscal Year 1978 and Review of the State of U.S. Strategic Forces, 95th Cong., 1st Sess. (1977) at 200.

Proponents of U.S. civil defense have pointed out that improved CD protection for the U.S. population (and, to the extent feasible, economy) can contribute to precisely the same goal as that set for U.S. strategic offensive forces--maximizing the "political, economic, and military power of the U.S. relative to the enemy in the postwar period" to "preclude enemy domination." This suggests that CD may be seen as not unrelated to the strategic deterrence equation, at least as that equation has been defined by the U.S.--in terms of relative postwar recovery capabilities.

This may or may not, of course, be the way deterrence is seen by Kremlin leaders, who are after all the persons to be deterred by the U.S. strategic posture. As Secretary of Defense Brown put it in his February 1978 Annual Report:

What counts in deterrence, however, is not only what we may believe, but also what Soviet leaders may believe. Unfortunately, we are quite uncertain about those beliefs.

An event that we may consider virtually certain, they may rank as very low in probability. What we may assume to be quite sufficient as a deterrent, they may regard as quite inadequate for themselves. What we may hope is credible as an employment policy, they may interpret as a bluff.^{24/}

Establishing what strategic posture will reliably deter the Soviets is thus a less than precise science. It is not surprising, therefore, that there has been so much debate on whether CD, Soviet or U.S., contributes significantly to the strategic balance.

This concludes the excursion to discuss the doctrine of Mutual Assured Destruction, CD as insurance vs. CD as an element of the strategic balance, and CD as related to U.S. strategic policy. As noted earlier, the 1976-1979 debate on U.S. civil defense has been conducted in the context of debate on these broader issues.

Executive Branch Studies on CD, 1976-1978

A study on U.S. civil defense policy was conducted by an interagency group in 1976, at the direction of the National Security Council. The study was classified, but in any case was overtaken by events, namely, the change in Administrations in January 1977, soon after submission of the NSC study.

The new Administration undertook three studies on civil defense, each of which built upon earlier work and analyses: (1) A study by the Intelligence Community of Soviet CD; (2) a DoD study for the Secretary of Defense on the feasibility, costs, and performance of alternative U.S. civil defense

^{24/}Department of Defense, Annual Report of Secretary of Defense Harold Brown to the Congress, February 2, 1978 at 54.

programs; and (3) an interagency study directed by the NSC on U.S. civil defense policy, which drew upon the studies of Soviet and U.S. civil defense. The NSC study considered, among other issues, the strategic implications of civil defense.

Soviet Civil Defense

The key findings of the study on Soviet CD, published in unclassified form in July 1978, 25/ included the following:

- (1) Soviet CD is a nationwide program under military control. The CD organization consists of over 100,000 full-time personnel at all levels of the Soviet government and economy.
- (2) The Soviets have made a sustained effort to provide blast shelters for the leadership and essential personnel. Blast protection is available for virtually all of the leadership at all levels, and for at least 10 to 20 percent of the urban population, including essential workers. (Professor Gouré believes that the Soviets have substantially more blast shelter available, sufficient for some 60 percent of the urban population.)26/
- (3) Evacuation during a crisis would be the main reliance for reducing urban casualties. It would take a week or more to evacuate urban areas and develop fallout shelters in rural areas, which would then provide a high level of protection for the evacuees.
- (4) Performance of Soviet CD would depend primarily on the time available for evacuation and other preparations:
 - With several hours to make final preparations, a large percentage of leaders and communications facilities would probably survive.
 - A large percentage (75 to 90 percent) of the essential work force in blast shelters would survive an attack designed to maximize damage to economic facilities.
 - Given a week or more to complete urban evacuation and to protect the evacuated population, casualties from prompt nuclear effects and fallout could be reduced to the low tens of millions, about half of which would be fatalities. (This suggests fatalities of 5, 10, or perhaps 15 million, or around 5 percent of the Soviet population.)

25/Director of Central Intelligence, Soviet Civil Defense, NI78-10003 (July, 1978).

26/Gouré, Leon, Shelters in Soviet War Survival Strategy, Miami, Florida, University of Miami, 1978 at 69.

- (5) Soviet measures to protect the economy could not prevent massive industrial damage. Some improvements are expected in ability to protect the economy, but a radical change in vulnerability is unlikely.
- (6) The Soviets almost certainly believe their present civil defenses would improve their ability to conduct military operations and would enhance the USSR's chances for survival following a nuclear exchange. They cannot have confidence, however, in the degree of protection their civil defenses would afford them, given the many uncertainties attendant to a nuclear exchange. The Intelligence Community does not believe that the Soviets' present civil defenses would embolden them deliberately to expose the USSR to a higher risk of nuclear attack.

Alternative U.S. Civil Defense Programs

The study for the Secretary of Defense addressed the feasibility and costs of U.S. civil defense programs which could, by the mid-1980's, give confidence that at least half to two-thirds of the U.S. population would survive a large-scale nuclear attack--assuming that one to two weeks were available during a crisis to bring CD systems to readiness.

The study for the Secretary was an internal DoD working document and has not been released.^{27/} However, the DoD study used as the basis for its analysis is a contract study^{28/} prepared for (and in cooperation with) DCPA. In a general way, the two studies look the same.^{29/}

The contract study examined the performance of a variety of civil defense programs, under a heavy, mid-1980's attack on both military and urban/ industrial targets. The programs ranged from no program, to the current program continued, to a program stressing evacuation of U.S. cities during an intense crisis, to a \$60 billion program to construct blast shelters in cities.

The results are shown on Figure 1 (next page), which summarizes the costs and effectiveness of the several programs.^{30/} No civil defense ("A")

^{27/}Senate Comm. on Armed Services, Hearings, Department of Defense Authorization for Appropriations for Fiscal Year 1979, Part 10, 95th Cong., 2d Sess. (April 1978) at 7197.

^{28/}Sullivan, Roger J. et al, Candidate U.S. Civil Defense Programs, System Planning Corporation, Arlington, Virginia, March 1978.

^{29/}Op. cit. supra note 27 at 7200.

^{30/}Op. cit. supra note 28 at 5.

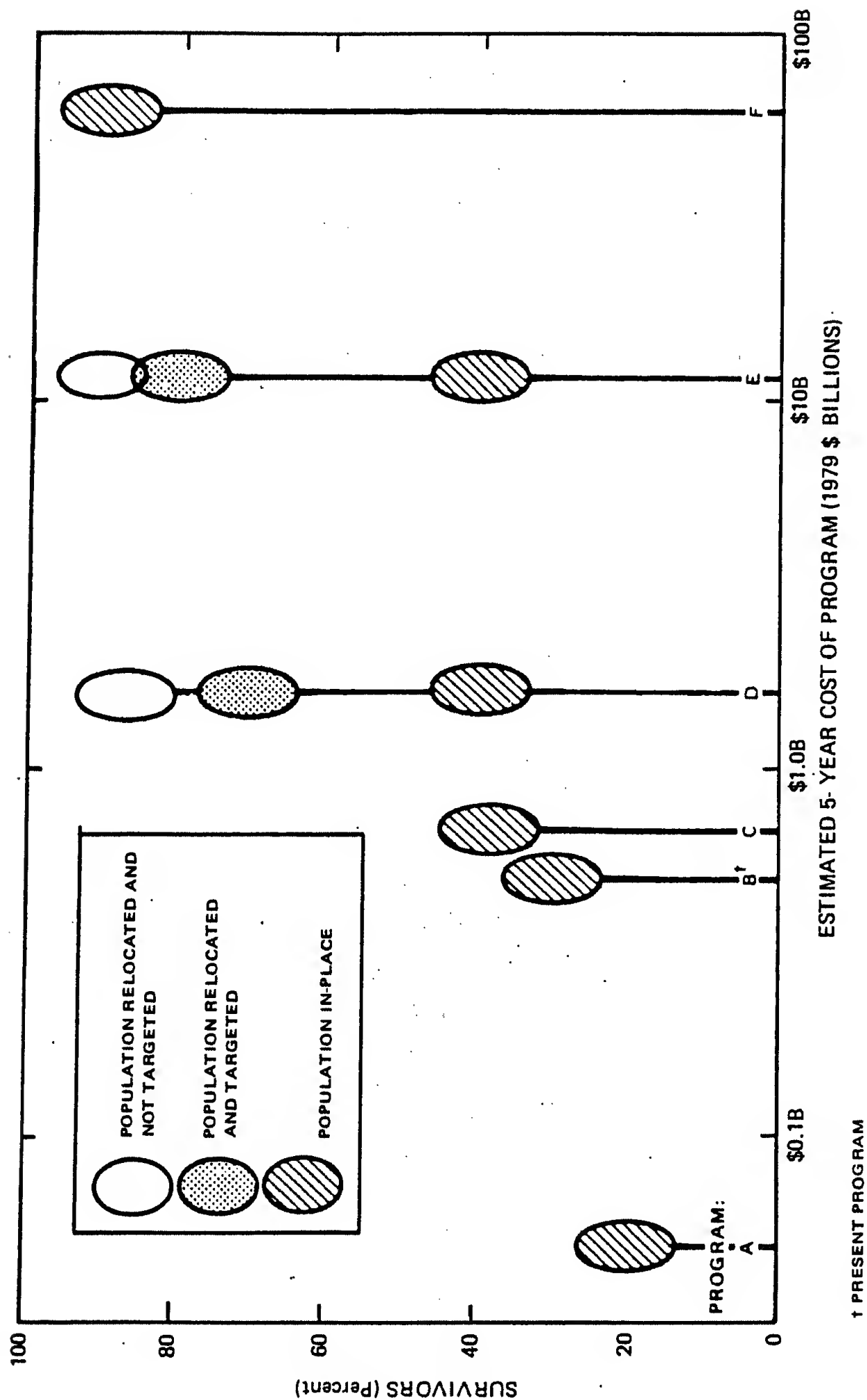


FIGURE 1. COMPARISON OF EFFECTIVENESS AND COST OF CD PROGRAMS
 (Large-Scale Mid-1980s Soviet Attack Versus U.S. Military and Industrial Facilities, and Population)

results in survival of about 20 percent of the U.S. population. The current program continued ("B") results in about 30 percent survival.

The first program offering a substantial level of survival is "D," which stresses development of crisis evacuation plans and necessary supporting systems and capabilities. Calculated survival for program "D" is in excess of 80 percent, on the assumption that during a week or more prior to the attack, about four-fifths of the 135M people in U.S. metropolitan areas had been evacuated and that fallout protection had been developed for them in "host" areas.

That is, crisis evacuation was assumed to have worked not perfectly, but quite well. Of course, if time or circumstances did not permit implementing crisis evacuation plans, total survival would be much lower, on the order of 40 percent (shown by the lower ellipse for program "D"). This is because the urban population would need to be sheltered in-place, in best-available protection in existing structures. While use of existing buildings provides some protection, and improves survival over the no-civil defense case, the urban population would remain quite vulnerable.

Getting people away from areas that were attacked would quite obviously improve survival, and the calculations made for the study show that crisis evacuation could increase survival by 40 percent or more, or on the order of 90 or 100 million people. The total cost for program "D" is some \$1.6 billion (FY 1979 dollars), or about \$1.1 billion more than that to maintain the current program, which has unacceptably low survival potential.

It is interesting that the lifesaving potential of reasonably effective but not perfect crisis evacuation is not much exceeded by that of the far more expensive blast system--program "F," with potential for about 90 percent survival.

The differences between crisis evacuation and blast shelter systems have to do with costs, with time required to protect the population, and with uncertainties. A blast shelter system could cost over \$60 billion, but shelters would be available to urban residents with only minutes of warning. A crisis evacuation system would cost much less in peacetime and could perform nearly as well--provided, however, that there were available the week or more needed to execute evacuation plans, that a timely decision were made to activate the plans, that most people cooperated in the evacuation movement, and that a number of other operations provided for in crisis relocation plans worked not perfectly but quite well--for example, crisis actions to develop fallout protection for evacuees in host areas.

In short, the only moderate-cost civil defense approach which has potential for high survival is based on crisis evacuation. The study for the Secretary also examined issues of feasibility and credibility, and concluded that a moderate civil defense program, stressing

crisis evacuation, would be feasible and would be acceptable and credible to most Americans.

More light was shed on issues of credibility by a national-sample survey conducted for DCPA in late 1978, involving in-depth interviews with 1620 adult Americans.^{31/} The results suggest that the public remains favorable in general to civil defense, and is receptive to crisis relocation in particular:

67% believe there could be crisis circumstances under which the President might urge people to evacuate high risk areas

78% believe the U.S. should have crisis relocation plans

70% say that if the President directed relocation, they would comply. (And additional people indicate they might well leave spontaneously, before any direction to do so)

75% believe the nation's communities would be helpful to evacuees

82% believe their own communities would be helpful, if asked to host evacuees. (In fact, 73% say they'd be willing to take evacuees into their own homes)

88% have a car available. (Of those without a car, 2/3 were sure they could rely on friends, neighbors or relatives to take them along)

58% say they have friends or relatives they are sure they could stay with, within 100 miles and not in another city

78% believe the U.S. should not unilaterally do away with civil defense

66% oppose the idea of a U.S.-Soviet agreement for both sides to do away with civil defense.

As for the feasibility of a civil defense program stressing crisis evacuation, this clearly turns on the feasibility of relocating over 100 million people from potential risk areas during an intense international crisis. There are obviously many uncertainties involved. For example, would the direction to relocate be issued in time? Would the response of the population be predominantly cooperative and constructive? Would local and State officials, throughout the country, be effective in assisting the population to move to host areas, in providing

^{31/}Nehnevassja, Jiri, Issues of Civil Defense: Vintage 1978--Summary Results of the 1978 National Survey, University of Pittsburgh, 1979.

temporary lodging and feeding, and in developing fallout protection in host areas?

There can be no complete certainty as to these and related issues, and opinions vary. At one extreme, some maintain that crisis relocation--and traffic control in particular--would be extremely difficult if not impossible, especially in densely urbanized areas such as the Northeast. A smaller group maintains, to the contrary, that the U.S. now has a crisis relocation capability by virtue of its extensive resources of autos, roads, and other transportation--and that no special plans or preparations are needed, as shown by the fact that so many people from our largest metropolitan areas go to the beach over long weekends in the summer. DCPA believes that neither extreme view is valid.

It is DCPA's judgment, based on extensive research and developmental work, that crisis relocation could be highly effective--given the requisite planning and development of supporting systems and capabilities, and given about a week for moving and protecting the bulk of our population at risk. For example, while no one can issue a guarantee that the response of the population would be predominantly cooperative and constructive, experience in peacetime disasters and wartime situations requiring evacuation is that most people will comply with official instructions, provided these are understandable and appear to make sense in terms of improving chances for survival. Also, planning includes provision for temporary lodging and feeding for evacuees, and for developing fallout protection in host areas. It is important to note that relocation has great lifesaving potential even if it works not perfectly but quite well.

It is significant that on September 1-3, 1939 the British moved some 1.5 million women and children from London and a few other large cities in what was a crisis evacuation, for Britain did not declare war until September 3. (Also of interest are the facts that some 2 million additional persons spontaneously evacuated at their own initiative, and that this was unsuspected at the time by the British government.) It is also worthy of note that in Hurricane Carla, in 1961, between half and three-quarters of a million people were evacuated from Gulf Coast cities without a single fatality or a major reported accident.^{32/}

Issues bearing on the feasibility of crisis evacuation of U.S. cities are discussed in depth in DCPA's "Questions and Answers on Crisis Relocation Planning,"^{33/} which are based on extensive research as well as substantial experience since 1975 with such planning.

^{32/}Senate Committee on Banking, Housing, and Urban Affairs, Hearings, Civil Defense, 95th Congress, 2d Session (January 1979) at 51-52.

^{33/}DCPA, "Questions and Answers on Crisis Relocation Planning," Information Bulletin No. 305 (April 20, 1979).

Congressional Hearings and Testimony, 1976-1978

Civil defense-related issues were discussed fairly frequently and extensively in Congressional hearings during the period when the several Executive Branch studies on CD were underway. These discussions are of interest as reflecting developing views on civil defense both outside of and within the Executive Branch.

--T.K. Jones' Testimony and the Debate on Postwar Recovery

In late 1976, Senator Proxmire's Joint Committee on Defense Production (since abolished) held hearings on industrial preparedness at which T.K. Jones presented a study and extensive testimony which expanded upon his testimony to the House Committee on Armed Services earlier in the year. His major findings and conclusions included the following:^{34/}

- (1) Soviet civil defense (including crisis evacuation of cities) could reduce fatalities, in a U.S. retaliatory attack, to no more than 10 million people.
- (2) Survival of the work force is by far the most important factor influencing industrial recovery of a nation following a nuclear attack.
- (3) Next in importance is survival of capital assets, with the survival of machinery being more important to prompt recovery than the survival of the buildings that housed the machinery.
- (4) During World War II, the Soviets evacuated over 1500 industrial enterprises, including 85 percent of their aviation industry, east of the Urals.
- (5) Techniques shown in Soviet CD manuals for "hasty hardening" of industrial equipment provide for covering machinery with earth or sandbags.
- (6) Boeing tested these techniques in Defense Nuclear Agency tests, one involving detonation of 500 tons of TNT.
- (7) These tests confirmed that hardening to a level of 20 to 40 pounds per square inch (psi) is easily provided by a light covering of earth. Hardening to levels of 60 to 150 psi can be obtained by packing machinery in crushable material (such as metal "chips" produced by machining operations).

^{34/}Joint Committee on Defense Production, Hearings, Defense Industrial Base: Industrial Preparedness and Nuclear War Survival, 94th Congress, 2d Session (1976) at 55-127, esp. 58-61, 65, 115-123, and 125-127.

- (8) Given execution of Soviet civil defense plans, including those for protecting industrial equipment and the work-force, it was believed that the USSR could recover from a nuclear war in 2 to 4 years, whereas the U.S. could not recover in less than 12 years.
- (9) Nationwide planning and preparedness for crisis actions to protect U.S. industries was estimated to cost a total of \$200 to \$300M, for 40 to 80 psi protection. (The cost of preparedness to develop 200 to 300 psi protection was much higher, an estimated \$2.5 to \$3B.) Studies would need to be made of the protection problems unique to each industry (e.g., steel), before planning could be started.^{35/}

In a more general vein, Mr. Jones observed:

There is widespread belief that nuclear war would inevitably destroy both the United States and the Soviet Union. . . .

The avoidance of war, however, does not necessarily depend on what Americans believe. It depends on what the leaders of the Soviet Union believe, even if their belief should be ill-founded. . . .

The threat of mutual assured destruction will provide an effective deterrent only if the Soviet rulers believe that the threat is indeed mutual. . . [However] the Soviets do not subscribe to the West's concept of assured destruction. On the contrary, there is a growing body of evidence that the Soviet Union is preparing to survive and recover from nuclear war should such a war occur. . . .

These Soviet [CD] preparations substantially undermine the concept of deterrence that forms the cornerstone of U.S. security. . . . [T]hese defensive preparations, combined with the increasing power of Soviet strategic offensive forces, have in fact destabilized the strategic relationship between the two nations. (Emphasis added.)

^{35/}Id. at 123.

Under such a condition, the so-called balance of terror shifts significantly in favor of the Soviet Union. In any future confrontation, should the Soviet execute its civil defense plans, the consequence of further escalation would be disastrous to the United States. It might well be tolerable to the Soviets. The most probable outcome, then, is not nuclear war; it is more likely to involve increasingly costly concessions by the U.S. in order to avoid nuclear war. (Emphasis added.)^{36/}

Mr. Jones stated these themes even more emphatically in material provided for the record, in answer to questions posed by the Committee:

The . . . estimated [Soviet] losses (ranging from 5 to 11 million) are clearly a tolerable level. The Russians have tolerated far greater losses before, once by their own choice for a political purpose [i.e., the losses from collectivizing agriculture and from the purges in the 1930's, usually estimated at over 15 million]. . . .

I firmly believe that the present Soviet leadership would have no qualms in risking the loss of 20 million or so of its population. The Soviet state and indeed its predecessor the Tsarist state have long conducted foreign policies . . . primarily for the enhancement of the state, with the population usually paying a heavy price for these expansionist endeavors. The Soviet leadership can and historically has made comparable sacrifices of population in order to achieve political, economic, or territorial benefits.^{37/}

As the correlation of forces shifts further in favor of the Soviet Union, it is not unrealistic to believe that the United States would be willing to back down in confrontations even more important than Angola and the Middle East [in 1973] The Soviets believe we have rational leadership and that the U.S. leadership, when placed at a major disadvantage, as the Soviets themselves were in 1962 [during the Cuban missile crisis], can be forced to acquiesce to Soviet demands in future confrontations. (Emphasis added.)^{38/}

These stark and alarming conclusions could scarcely be termed dovish, and they of course provoked rebuttals. One of the earlier ones was the April 1979 report by the Joint Committee.^{39/} Major conclusions included

^{36/}Id. at 30 and 32.

^{37/}Id. at 185

^{38/}Id. at 200.

^{39/}Joint Comm. on Defense Production, Report, Civil Preparedness Review, Part II, Industrial Defense and Nuclear Attack, 95th Cong., 1st Sess., (Jt. Comm. Print, April 1977).

the following:

- (1) Passive defense measures can generally be overcome by an adroit adversary, as by targeting nuclear weapons to sharply reduce the advantages of dispersal or of expedient measures to protect industry (e.g., protecting industrial equipment with earth).
- (2) Many of the vital assets of an advanced economy--such as portions of the economic infrastructure--cannot be protected by passive defenses.
- (3) It will thus continue to be a practical impossibility to achieve a defensive capability adequate to "protect all the prerequisites of major power status."
- (4) Hence, to adopt the view that either nation can attain the ability to "win" a major nuclear exchange, in any meaningful sense, or to survive it as a major power through passive industrial defense, runs the risk of encouraging dangerous strategic miscalculations.
- (5) The outcome of a large-scale U.S.-Soviet nuclear exchange continues to be their mutual termination as world powers, and possibly as modern, organized societies.
- (6) Evaluations of postattack recovery should include fuller consideration of long-term effects of nuclear detonations, and their possible impact on the recovery process.

Some of these themes were later elaborated in studies by those holding that vulnerability was indeed, for all practical purposes, mutual and that civil defense is not related to the U.S.-Soviet strategic balance.

--Department of Defense Testimony

During 1977 and 1978, there was also testimony on CD-related issues by various Department of Defense witnesses. This is of interest as shedding light on evolving thinking, within DoD, on issues relating to the strategic balance and to civil defense.

In 1978, General David C. Jones, then Chief of Staff of the Air Force (now Chairman of the Joint Chiefs), made some observations on the role of "perceptions" in deterrence:

[W]e never will know precisely what is sufficient to deter enemy leaders (even they may not be able to answer that question from day to day). . . .

There appear to be two significantly different approaches today to viewing deterrence. The first school of thought. . . holds that nuclear war is unthinkable and is kept unthinkable by assuring significant (although not necessarily equal) destruction to both [superpowers] regardless of which strikes first. . . .

The second approach. . . assumes that the resolve of national leaders is the critical element underlying decisions (or indecisions), and that this resolve, especially in crises, can be decisively influenced by relative perceived advantages in strategic posture. (Emphasis added.)^{40/}

Strategic perceptions as related to civil defense were addressed by Brigadier General James M. Thompson of the Office of the Assistant Secretary of Defense for International Security Affairs, in both Senate and House hearings:

[W]hatever the actual or potential effectiveness of the Soviet program, we must be concerned about perceptions of Soviet superiority based on marked asymmetries in civil defense efforts.^{41/}

[M]arked asymmetries in our apparent ability to protect our populations might affect one's perceptions, either ours or the Soviets' or third countries' . . . of where we are relative to each other, and do we really have. . . rough equivalence. That kind of perception, if the Soviets made it, might embolden them in other areas of the world.

It might tend to erode our sense of self-confidence and it might also make us more vulnerable to coercion, in the sense of our will. . . to carry out our declared strategy, which . . . is a deterrent strategy but with a willingness to do what has to be done, if necessary. It might erode confidence in that capability. I think in that sense it has profound implications. . . . (Emphasis added.)^{42/}

In the [CD] program the Defense Department is coming up with in terms of crisis relocation and fallout shelter planning, our feeling is we can't tolerate marked asymmetries in relative population vulnerability. (Emphasis added.)^{43/}

^{40/}Senate Comm. on Armed Services, Hearings, Department of Defense Authorization for Appropriations for Fiscal Year 1979, Part I, 95th Cong., 2d Sess. (1978) at 1013 and 1009-1010.

^{41/}Id., Part 10, at 7180.

^{42/}Id. at 7202.

^{43/}House Comm. on Armed Services, Hearings on Military Posture and H.R. 10929, Department of Defense Authorization for Appropriations for Fiscal Year 1979, Part 6, 95th Cong., 2d. Sess. (1978) at 22.

General Thompson had outlined the relationship between CD and other strategic programs as follows:

[A]lthough civil defense in the past has not played a major role in national strategic policy, it certainly does deserve our attention. Civil defense policies need to be considered in the context of their peacetime effect on perceptions, possible deterrent effect, real dollar costs, and of course, possible effect on reducing casualties and enhancing recovery in the event that deterrence should fail. Civil defense programs thus cannot be considered as independent of the rest of our strategic nuclear programs. (Emphasis added.)^{44/}

With regard to the possible efficacy of Soviet plans for hasty hardening of industrial equipment, Secretary of Defense Brown stated:

We must assume that the Soviets can and would execute their plans for hardening, but we cannot forecast precisely the extent or overall effectiveness of their peacetime or wartime efforts at hardening.

The basics of industrial hardening are treated openly in manuals and other civil defense literature, but the actual wartime operational plan for a given factory is classified information retained by the manager and the civil defense chief for the facility; these individuals would implement this plan when notified. Factory civil defense cadres would execute its provisions, using factory personnel as needed.^{45/}

Finally, General Jones testified as follows concerning the relationship between Soviet civil defenses and the strategic balance:

If the Soviets were able to limit economic damage and population losses to levels far lower than those they could inflict on the United States, they would indeed have achieved a significant margin of superiority. To date, Soviet efforts in this area have far exceeded those of the U.S. However, if the U.S. modernizes its strategic force, it is unlikely that the Soviets can ever achieve a degree of protection that would seriously disrupt the strategic balance.^{46/}

^{44/}Op. cit. supra note 41 at 7182.

^{45/} Op. cit. supra note 23 at 213.

^{46/} Op. cit. supra. note 40 at 1125.

This statement is significant because it has sometimes been suggested that since U.S. nuclear strategy is based on deterrence via a retaliatory threat to Soviet recovery capability--targeting political, economic, and military assets and not population per se--population fatalities are irrelevant to deterrence (at least as defined by the U.S.)

The CD Program Decision of the Secretary of Defense

Based on the results of the study of CD program options outlined at pages 13 to 16 above, and in the context of DoD views on CD as related to the real or perceived strategic balance, the Department of Defense decided in 1978 to implement an enhanced CD program. The program was to emphasize crisis evacuation, and was designed to result ultimately in survival of at least two-thirds of the U.S. population in a large-scale, mid-1980's attack, given at least a week in which evacuation plans were executed and other preparations made. Annual costs would average about \$230 million in FY's 1980 through 1984 (in FY 1979 dollars).^{47/}

The DoD decision was made while the NSC study on civil defense policy was still pending, addressing issues beyond population protection, such as the strategic implications of CD and programs to protect governmental leadership. Thus the DoD decision on programs to protect population was subject to change either upward or downward by the Presidential decision on the broader issues considered in the NSC study.

Presidential Decision 41

The interagency study of U.S. civil defense policy, directed by the President in September 1977, was conducted over a period of about a year, and drew upon the studies of Soviet and U.S. civil defense programs outlined above.

Among the specific questions addressed were: "What is the role of civil defense in strategic policy?" "Can civil defense make a significant difference in the outcome of a nuclear exchange?" "What civil defense measures would be most useful?" and finally, "If a role is identified, what should it be?" Hence, the study looked not only at whether civil defense would make a difference in nuclear war, but also at whether it could play a role in a preattack crisis.

The study examined a range of CD program options for the United States, and was presented to the Policy Review Committee of the NSC and then to the President. The options were essentially the same as those analyzed in the earlier study for the Secretary of Defense: (1) essentially no program; (2) the current program; (3) a program providing for evacuating the population of larger U.S. cities and other risk areas, should time

^{47/}Op. cit. supra note 43 at 10; op. cit. supra note 40, Part 10, at 7182.

permit during a period of strategic warning resulting from an international crisis; and (4) a short warning time program to protect the population in-place, including construction of blast shelters in cities.

In September 1978, the President directed in Presidential Decision (PD) 41 that a new civil defense policy be implemented along the following lines:

- That the United States civil defense program should enhance the survivability of the American people and its leadership in the event of nuclear war, thereby improving the basis for eventual recovery, as well as reducing vulnerability to a major Soviet attack;
- That the program should enhance deterrence and stability, and contribute to perceptions of the overall U.S./Soviet strategic balance and to crisis stability, and also reduce the possibility that the Soviets could coerce us in times of increased tension;
- That the CD policy not suggest any change in the U.S. policy of relying on strategic nuclear forces as the preponderant factor in maintaining deterrence; and,
- That the program include planning for population relocation during times of international crisis as well as be adaptable to help deal with natural disasters and other peacetime emergencies.^{48/}

PD 41 reflected a significant change from the "insurance" rationale for civil defense that was stated by President Kennedy in 1961 (in the era of overwhelming U.S. strategic predominance). Now, with "essential equivalence" characterizing the U.S.-Soviet strategic balance, U.S. civil defense was seen as related to the balance--it was to "enhance deterrence and stability," and to contribute to "perceptions" of the strategic balance--although (obviously) this was not to suggest any change from placing preponderant reliance on offensive forces for deterrence.

Further, U.S. civil defense (including a crisis relocation capability) was to contribute to crisis stability, and in particular to reduce the possibility of Soviet coercion during a crisis. This clearly referred to the need to develop a counter-evacuation capability, for use should the Soviets attempt to intimidate us by evacuating their cities during a crisis--a possibility raised by Secretary of Defense Schlesinger in 1975, and stressed by Paul Nitze, T.K. Jones, and others more recently.

^{48/}The material on the NSC study and PD 41 is taken from presentations by Bardyl R. Tirana, DCPA Director, to the House and Senate Committees on Armed Services and on Appropriations in February, March, and April 1979. Printed copies of the hearings have not yet been received, but Mr. Tirana's statement has been reproduced in DCPA Information Bulletin No. 303, "Presentations on Civil Defense at Congressional Hearings" (April 5, 1979).

PD 41 raised two issues: What would be done by way of program funding to implement the PD 41 policies? How would the strategic community react to the Presidential policies--in particular the arms control community? The latter group had of course taken sharp issue with Paul Nitze, T.K. Jones, Leon Gouré, Eugene Wigner, General Keegan, and others who had seen U.S. deterrence as eroded if not undermined by Soviet civil defense (in conjunction with other elements of the U.S.-Soviet correlation of forces).

The FY 1980 Budget Request for Civil Defense

As for funding, PD 41, as a policy statement, did not expressly contain any program details or associated budget decisions. However, the underlying study for PD 41 outlined program options and their associated costs. One option stressed crisis relocation, the civil defense program alternative the Secretary of Defense had decided to implement starting in FY 1980, subject to policy and budget review.

The President's policy decision supported the Secretary's program recommendation. This was the program, outlined earlier, stressing development of crisis relocation plans and supporting capabilities, with annual costs averaging about \$230 million in FY's 1980 through 1984 (in FY 1979 dollars).

As early as April 1978 (several months before completion of the NSC study), a New York Times article reported that Secretary of Defense Brown had urged President Carter to support an annual increase of \$50 million a year, at least until 1984, for the civil defense budget. The article was said to be based on a 10-page classified memorandum which summarized planning guidance given to the armed forces. A \$50 million increase would suggest a request of roughly \$150 million for FY 1980, the first year of the enhanced program.

Concerning CD, the article quoted the Secretary's memorandum as follows:

As you know, the Soviets have shown great interest and considerable activity in this field. While I do not believe that the effort significantly enhances the prospects for Soviet society as a whole following any full-scale nuclear exchange, it has obviously had an effect on international perceptions, particularly in contrast to our small and static civil defense program. For that reason alone, I believe at least modest efforts on our part could have a high payoff. (Emphasis added.)^{49/}

In October and November, 1978, there were press reports about PD 41, and a Presidential decision for a CD program involving expenditure of "...

^{49/}New York Times, April 7, 1978, p. 3.

nearly \$2 billion over the next seven years. . . ."^{50/} On November 30, however, the President said at a news conference that:

The press reports about a \$2 billion civil defense program have been completely erroneous. . . . No proposal has ever been made to me for a civil defense program of that magnitude.

We are considering the advisability of pursuing some civil defense assessments, including the fairly long-term evacuation of some of our major cities if we should think. . . nuclear war would be likely. . . .^{51/}

Later in December there were reports that the President had chosen to allot \$115 million to CD in the FY 1980 budget, rather than the "at least \$145 million" requested by Secretary of Defense Brown.^{52/}

At all events, the FY 1980 budget request as finally submitted was for \$108.6 million. This was presented as follows in Congressional hearings in February, March, and April, 1979:

The FY 1980 request of \$108.6 million represents the initial step towards implementing President Carter's policy and Secretary Brown's program decisions, and reflects the constraints affecting most programs for next year. This request constitutes a significant

^{50/}Evans and Novak, "A \$2-Billion Boost for Civil Defense," Washington Post, October 20, 1978, p. A___. The basic article on PD 41 was by Richard Burt, "Carter Adopts a Program to Bolster Civil Defense in a Nuclear Attack," New York Times, November 13, 1978, p. A1. The Burt article referred to a program totalling \$2 billion, to be completed by 1985. The Times article was followed by a rash both of press articles and editorial comments, some of the latter being favorable but more, especially in the metropolitan dailies, being opposed. The Christian Science Monitor's editorial of November 14, 1978 was favorable, but editorials opposing the reported program were published in the New York Times on November 14, and in the Washington Post on December 15. Clippings on the extensive press coverage of CD, in November and December 1978, are available. A number of the articles and editorials dealt with the feasibility of crisis evacuation.

^{51/}New York Times, December 1, 1978, p. 22.

^{52/}New York Times, December 28, 1978, p. 1. Evans and Novak reported on Jan. 5, that, "The '\$2 billion civil-defense program' discussed in the press, followed by editorial attacks on Carter's new doctrine making civil defense part of the strategic balance, frightened the President. Internal opponents, at ACDA and at State, quickly moved in to ridicule the whole idea of civil defense. . . . The new budget. . . falls far short of the \$140 million. . . originally expected to be approved by Carter. Instead, it is around \$110 million. . . ." Washington Post, Jan. 5, 1979, p. A19.

first step, and contains a real program growth of about six percent over the current level of spending. This funding lays the foundation for developing crisis relocation capabilities at an accelerated pace in FY 1981 and future years. . . .

An important point of the President's policy decision is that civil defense capabilities are a factor to be taken into account in assessing the strategic balance. The FY 1980 budget request represents a start on developing capabilities consistent with this policy. Thus, this budget marks a turning point in U.S. civil defense.^{53/}

Congressional reaction to the FY 1980 request will be discussed below.

The January 1979 Proxmire Hearings

In January 1979, Senator Proxmire chaired further hearings on civil defense,^{54/} at which opposing views as to the relationship between CD and the strategic balance were clearly stated and contrasted.

Professor Samuel P. Huntington, Director of the Harvard Center for International Affairs, testified in support of an enhanced CD program based on crisis relocation. He contended that civil defense was related to the strategic balance and to perceptions of the balance, and could reduce the possibility of the Soviet Union attempting to coerce the United States during a crisis. Dr. Huntington had been Coordinator of Security Planning for the NSC during the period when the interagency study on U.S. civil defense policies had been prepared, and had in fact chaired the interagency task force which prepared the study.

Mr. Paul C. Warnke presented opposing points of view, held by many in the arms control community. He had been Director of the Arms Control and Disarmament Agency (ACDA), but by the time of the hearings had returned to law practice. Both major witnesses, therefore, were familiar with the issues but were in position to state their views candidly, without the constraints that can arise from holding government appointments.

--The ACDA Study on Civil Defense

Mr. Spurgeon M. Keeny, Deputy Director of ACDA, also testified and discussed a study completed by ACDA in December 1978, "An Analysis of Civil Defense in Nuclear War."^{55/} Mr. Keeny said that ACDA's interest in CD focusses on its role in the overall U.S.-Soviet strategic balance and its potential impact on arms control agreements.

^{53/}Op. cit. supra note 48.

^{54/}Senate Committee on Banking, Housing, and Urban Affairs, Hearings, Civil Defense, 95th Congress, 2d Session (1979).

^{55/}Reprinted, id. at 93-116.

He said that while Soviet CD could reduce the number of short-term fatalities in a nuclear war, not:

. . . even a Soviet CD program, far more massive than that indicated by current intelligence. . . . could render a large-scale nuclear war anything but an unparalleled disaster for the Soviet Union. We see nothing that indicates the Soviets have a contrary view. Thus, although civil defense may be a factor in the perception of the broader strategic equation, it is vastly overshadowed in importance by the [military] forces and the war plans of the opponents.^{56/}

Other major points in Mr. Keeny's testimony, based upon the ACDA study, included the following:^{57/}

- (1) A U.S. retaliatory attack, following Soviet urban evacuation and a first strike on U.S. strategic forces, would result in 25 to 35 M Soviet fatalities from short-term effects (as contrasted with the substantially lower number resulting from the CIA, T.K. Jones, and other analyses).^{58/}
- (2) The ACDA estimates of 25 to 35M Soviet fatalities assumed no change in U.S. targeting philosophy. More fatalities would result from ground-bursting U.S. weapons, or from using reserve weapons against evacuated population (i.e., attacking population *per se*).
- (3) Results of attacking industry would be devastating, with U.S. retaliation destroying 65 to 70 percent of "key Soviet production capacity" after a Soviet attack with little warning, and 85 to 90 percent if U.S. forces had been fully generated (i.e., were on increased alert).
- (4) Attempts at industrial hardening would be costly and of marginal utility, in view of the destructive power of current and programmed U.S. weapons.
- (5) The longer-term consequences of nuclear war cannot be quantified in the same fashion as the immediate effects, but fatalities would be "greatly" increased by factors such as lack of health

^{56/}Id. at 49.

^{57/}Id. at 47-48.

^{58/}At 83, Mr. Keeny took strong issue with the T.K. Jones analysis, saying that ". . . his study is so severely flawed in its basic assumptions that its conclusions are totally misleading and should be ignored." Mr. Jones provided a rebuttal, id. at 263-268, and ACDA a rejoinder, id. at 269-276, each addressing details of the assumptions and analyses used.

care for the injured and diseased victims, lack of food, and possible long-term effects resulting from destruction of the ozone layer. These effects would also severely affect the ability of a society to regenerate itself.

Professor Huntington commented as follows on the ACDA study, in a statement^{59/} provided for the record:

- (1) This ACDA report presents in summary fashion some of the analysis and conclusions contained in four classified reports which ACDA contributed to the PRM-32 study of civil defense [i.e., the NSC interagency study]. The Federal Preparedness Agency, the Office of Program Analysis and Evaluation in OSD, the Central Intelligence Agency, and the RAND Corporation also prepared reports which cover many of the same issues and which were also used in the PRM-32 study. The ACDA report is thus only one of a number of analyses of these highly controversial issues; unlike the final overview report for PRM-32, it was never submitted for interagency review; much of its analysis and many of its conclusions are different from and have been contradicted by the reports of other agencies. It is, thus, in no sense an authoritative statement of the views of the U.S. Government. (Emphasis added.)
- (2) The ACDA report tends to convey a spurious impression of precision and accuracy. While its authors admit that many of the possible effects of a nuclear exchange "are difficult to measure and simulate on computers," they nonetheless attempt to do exactly that and where computer simulation is possible to ascribe great authority to the results that are produced. These analyses, however, deserve to be treated with great caution and skepticism. With slight variations in assumptions and input data, studies by other agencies produce significantly different results. The world fortunately has had no experience with nuclear warfare since 1945, and a high degree of intellectual humility is required in attempting to predict what the nature and consequences of such warfare would be now. I do not detect that humility in many of the seemingly-confident predictions contained in the ACDA report. (Emphasis added.)
- (3) The ACDA report is directed primarily to an analysis of the effects of nuclear war on the Soviet Union, not the United States. This analysis rests on very optimistic assumptions (from the U.S. viewpoint) as to the ineffectiveness of Soviet civil defense with respect to: (a) the evacuation and dispersal of urban population; (b) the protection of evacuees against fallout; and (c) the protection of industrial machinery.

^{59/}Id. at 44.

These assumptions are challenged as unrealistic by critics of the report. In the absence of a nuclear crisis, we will not know conclusively whether or not the assumptions are justified. Given this uncertainty and the consistent optimistic "tilt" of these assumptions, however, the United States clearly would not be justified in basing its policy on an analysis resting solely on these assumptions. (Emphasis added.)

- (4) The general import of the report and the interpretation given to it by ACDA officials is that nuclear war will be so horrible that no feasible civil defense effort could make much difference to the outcome of such a war. The lessons which should be drawn from an analysis such as ACDA's, however, are that: (a) the U.S. should do everything possible to prevent nuclear war; (b) since we can never be certain nuclear war will be avoided, we should take whatever reasonable steps we can to mitigate its consequences. . . . In short, even by ACDA's figures, if the Soviets implemented their civil defense plans and we lacked a comparable capability, almost 90% of the Soviet population and less than 50% of the U.S. population would survive a nuclear exchange in the mid-1980's. These figures, like others, must be treated with caution, but they surely establish a firm basis for believing that civil defense could make a difference involving tens of millions of lives. Given this stake, the development of an effective U.S. evacuation capability by the mid-1980's clearly warrants investment of the \$200 million a year it would cost. (Emphasis added.)

--DCPA Study on Postattack Recovery

With regard to problems of postattack recovery, including longer-term consequences, a recent DCPA research report^{60/} provides an overview of research on these issues, in which over \$17 million has been invested. The principal author, Mr. Jack C. Greene, served in the successive Federal civil defense agencies since 1951, and was Director of Post-attack Research for ten years.

Major points include the following:

- (1) More than adequate supplies of food and water would be available, and the problem would be to get these to the survivors who needed them. Even without plans and preparations, the number of people who would die due to lack of food would likely be very small, especially when compared to those who had succumbed to earlier effects of the attack.

^{60/}Greene, Jack C. et al, Recovery from Nuclear Attack, International Center for Emergency Preparedness, Washington, D.C., February 1979, reproduced in DCPA Information Bulletin No. 307, "Research Report on Recovery from Nuclear Attack" (May 10, 1979).

- (2) Large-scale disease or epidemics need not, and probably would not, occur.
- (3) The degree of industrial damage that would be expected from even a major attack would not produce insuperable bottlenecks, although damage would be massive.
- (4) Problems of managing a severely damaged economy, however, could be the most difficult barrier of all to recovery. More research is needed.
- (5) Radiation exposures suffered by the survivors would increase the incidence of various types of cancer. The net effect would be observable on a statistical basis, but would be an unimportant social, economic, and psychological burden on the surviving population.
- (6) Whether there would be a problem due to depletion of ozone in the stratosphere is uncertain, and more research is needed. (A more recent report by the Congressional Office of Technology Assessment notes that doubt has been cast on the likelihood of ozone depletion.)^{61/}
- (7) Long-term ecological effects would not be severe enough to prohibit or seriously delay recovery. A nuclear attack could not induce gross changes in the balance of nature approaching in type or degree the ones that human civilization has already produced (e.g., cutting forests, over-grazing hillsides).
- (8) Radiation-induced genetic consequences would likely be lost, as at Hiroshima and Nagasaki, in the "background noise," and would not seriously impede recovery.

In short, there is no doubt that should a large-scale nuclear exchange ever occur, the result would be a massive disaster for the societies involved. The death, suffering, misery, and long-term consequences of various types would have few parallels, if any, in human experience--certainly none in the history of the United States. But this is not the same as saying that recovery would be impossible. The DCPA report says:

Although the search certainly is not over, a great deal of research effort has been expended looking for an "Achilles heel" that would preclude recovery. In years of research, no insuperable barrier to recovery has been found. (Emphasis added.)^{62/}

^{61/}Office of Technology Assessment, U.S. Congress, The Effects of Nuclear War, Washington, D.C., May 1979 at 114.

^{62/}Op. cit. supra note 60 at 4. Two final rounds have been fired in the [footnote continued on next page]

--Civil Defense and the Strategic Equation

To return to the main theme of the January, 1979 Proxmire hearings, the views of the two major witnesses were sharply opposed on the basic issue of the relationship of civil defense to the U.S.-Soviet strategic balance.

Professor Huntington said that the Soviet Union will have significant advantages vis-à-vis the U.S. in two key sectors of the overall strategic balance:

First, the Soviets will have the capability to destroy a major portion of the U.S. ICBM force in a first strike, while the United States will not have a comparable capability vis-à-vis the Soviet Union. Second, the Soviet Union will have a substantial civil defense program which could, through a combination of shelters and evacuation, provide protection for Soviet leadership and the overwhelming majority of Soviet citizens in the event of a nuclear confrontation. The United States will not have a comparable capability. These two imbalances in the strategic equation interact with and reinforce one another. An American President would not be in an enviable bargaining position in a crisis if his ICBM force was vulnerable to a Soviet first strike, if Soviet leadership and population were substantially protected against a U.S. second strike, and if U.S. leadership and population were highly vulnerable to a Soviet third strike. (Emphasis added.)^{63/}

⁶² Continued/debate over postwar recovery. One was an article coauthored by T.K. Jones and W. Scott Thompson, "Central War and Civil Defense," 22 *Orbis* 681 (Fall, 1978). This was to the effect that after a Soviet counterforce attack (on U.S. ICBM's, bomber bases, and ballistic missile submarine ports), the U.S. would lose much more by escalation than the USSR--and thus would be apt to make greater concessions during a crisis to avoid escalation. "The U.S. would likely be deterred from retaliation against Soviet cities." (Emphasis in original.) The authors felt that it would be best to abandon the present destruction-oriented concept of security and move toward a protection-oriented strategy, emphasizing the survivability rather than the vulnerability of society. Civil defense would be by far the most economical means of protection.

To the contrary was a paper developed by Representative Les Aspin (Wisconsin), "The 'Mineshaft Gap' Revisited: Soviet Civil Defense and U.S. Deterrence" (December 1977). This drew but also expanded upon the ACDA study, *op. cit. supra* note 55. It was to the effect that Soviet CD efforts "could not remotely alter the strategic balance," and that the U.S. deterrent capability is sound and secure. Responding with a very expensive CD program of our own is neither sound nor necessary.

^{63/} Proxmire hearings, *op. cit. supra* note 54 at 29-30,

Mr. Warnke's view was to the contrary. He said that civil defense could have "... no actual debilitating impact on the retaliatory capability of either side," because of the vast destruction a nuclear exchange would cause--both would suffer unacceptable damage. As for perceptions of the strategic balance, he believed that the role of civil defense was "not a significant one," and added:

There can, in my opinion, be no question of the fact that the Soviet leadership must recognize the futility of the Soviet civil defense effort as a means of protecting civil population, industry and infrastructure. The Soviets cannot be judged as so blind and so reckless as to assume that any present or prospective shelter program or any fond hopes of speedy evacuation to safe zones may make it possible for them to utilize strategic nuclear war as a means of achieving political objectives. (Emphasis added.)64/

Everyone hopes, of course, it is indeed a "fact" that Soviet leaders "must" recognize that CD would be futile, and that they are neither so blind nor so reckless as to suppose that CD--in conjunction with all other elements of the strategic equation--would make nuclear war a usable instrument of policy. Not all would agree, however, that these hopes will infallibly be realized under any and all conditions of crisis--for example, a situation in which Soviet leaders might perceive a threat to the USSR as a national entity, or to the continued authority of the Party.

Mr. Warnke concluded:

... I believe that it is completely unrealistic and potentially destabilizing to consider that civil defense can play any genuine part in the strategic balance. Any conclusion that we should seek to match whatever it is that the Soviet Union may be doing in the civil defense field could lead only to a mindless race in this area, with the result being a diminution of stability in time of crisis. (Emphasis added.)65/

--Civil Defense and the Credibility of Deterrence

Dr. Huntington asked why it was that the Soviets continued and indeed intensified their CD activities after achieving nuclear parity with the U.S. in the early 1970's--when, according to the logic of the doctrine of Mutual Assured Destruction, their need for large-scale CD should have declined. He concluded that the explanation is to be found

64/Id. at 10.

65/Ibid.

in Soviet military doctrine and purposes:

In Soviet military thinking, the threat to commit suicide does not constitute meaningful deterrence. Effective deterrence has to involve not only the ability to inflict damage on the enemy, but also the ability to limit damage to oneself. Hence, if the Soviets are to exploit their new position of nuclear parity vis-à-vis the United States, they must also have the ability to protect their own society. . . . (Emphasis added.)^{66/}

He also believed that the lack of significant U.S. civil defense can only diminish the credibility of our deterrence of Soviet pressures:

By their words and actions, the Soviets have shown that they believe civil defense to be a critical element in deterrence. Given their belief, whether warranted or not, in the efficacy of civil defense, they can only perceive the United States as being weaker for the absence of such a program. Given the importance they attach to damage limitation as a necessary element in a deterrent posture, they cannot assign a high level of credibility to a deterrent policy which does not attempt to limit damage to U.S. society if that policy had to be implemented. A substantial asymmetry in survivability between Soviet and American societies in the event of nuclear war can only encourage the Soviets to question the seriousness of U.S. purpose and hence also encourage them to follow a more adventurous policy.

. . . In the event of a confrontation with the Soviet Union in which American society was considerably more vulnerable than Soviet society, the credibility of the U.S. nuclear deterrent with respect to Soviet military and diplomatic pressure on Western Europe would be greatly reduced in the eyes of both the Soviets and the West Europeans. This does not imply that this U.S. disadvantage would lead the Soviets to risk lightly nuclear war. . . . [However,] In an age of strategic parity, the greater the vulnerability of American society, the less the credibility of the U.S. strategic forces as a deterrent to Soviet military action in Europe or elsewhere. (Emphasis added.)^{67/}

Mr. Warnke's view, already cited, was that CD would not play a significant role in perceptions of the strategic balance, and this would apply as well to effects on the credibility of the deterrence afforded by the strategic forces of either side, or of both.

^{66/}Id. at 31.

^{67/}Id. at 32.

--Civil Defense and Crisis Coercion

Dr. Huntington contended that a meaningful U.S. civil defense program could:

. . . help to maintain stability, provide additional options, and furnish additional time for negotiation during a major crisis. It could significantly reduce the possibility of the Soviet Union attempting to coerce the United States in such a crisis. In the absence of a population relocation capability, if the Soviets began to evacuate their cities, the United States [could]. . . . be placed in a bargaining position vis-à-vis the Soviets in which the more vulnerable U.S. population would be held hostage by Soviet weapons. (Emphasis added.)68/

--Crisis Evacuation and Crisis Stability

Mr. Warnke's prepared statement said that an ". . . attempt to evacuate urban populations would, in the time of intense crisis in which it would occur, be provocative to the point of foolhardiness".69/ In testimony, he added:

. . . I think that [Soviet leaders] would have to recognize that extensive evacuation of the population in a time of crisis might in fact be regarded by us as so awesome a phenomenon as to lead to our striking first, because we would be sure that they were in fact preparing to strike . . . [T]hat is one of the reasons why civil defense could in fact be destabilizing in a time of crisis.70/

Others disagree. T.K. Jones, for example, pointed out in testimony at Senator Proxmire's 1976 hearings on industrial preparedness, that for the U.S. to launch an attack when the Soviets started evacuating their cities would be suicidal thing to do.71/

Dr. Huntington's view, with respect to the argument that evacuation of U.S. cities would be provocative, was that:

[I]t is almost impossible, I believe, to imagine an American President ordering an evacuation except when it was an unavoidable response to Soviet provocation. Evacuation of American cities is most likely to occur only after the Soviets order evacuation of their cities. In addition, what we are considering now is a program which would make

68/Ibid.

69/Id. at 10.

70/Id. at 14.

71/Op. cit. supra note 34 at 41.

evacuation a possible option, not a necessary choice. Unless the critics are willing to argue that evacuation is provocative under all circumstances no matter what the Soviets do, then the case stands for having that capability and being able to utilize it if it should be necessary.^{72/}

In 1978, a DCPA research study explored the relationship of crisis evacuation to crisis stability.^{73/} It was based on interviews with 31 persons from the strategic community, reflecting a wide spectrum of viewpoints and including several former senior DoD executives (former Secretary of Defense Donald Rumsfeld, Deputy Secretary Paul Nitze, and Assistant Secretary for CD Stuart Pittman). Thirty of the 31 respondents felt that if the Soviets evacuated their cities, the U.S. should do the same.

Views as to the impact of mutual evacuation on crisis stability were divided. Some respondents felt that tensions would be heightened. Others felt that, by emphasizing to all concerned the possibility of general war, mutual evacuation could provide added time for negotiations to resolve the crisis.

Some felt that a U.S. capability for crisis evacuation would lower the chance of an intense crisis. Many others felt that civil defense would be a side issue in any crisis, and that CD moves (including evacuation) would have a negligible impact on the central events of the crisis. Finally, many pointed out that whether mutual evacuation would raise, lower, or leave unchanged the probability of further escalation would depend greatly on the specific crisis scenario.

In short, as with so many other aspects of the debate both on deterrence in general and on the relationship of CD to deterrence, opinions vary. They are based, in the last analysis, on speculation as to what future Soviet and U.S. leaders would be apt to do, in some future crisis, involving issues which cannot be specified with great confidence in advance, and in the context of a real (and perceived) future correlation of forces about which there is also disagreement.

--Would Civil Defense Increase U.S. Willingness to Take Risks?

The view has sometimes been advanced that improved CD might make U.S. leaders more apt to take risks in a crisis, or make the U.S. population more bellicose. As to the former, Dr. Huntington observed:

[S]ome critics say that possession of an evacuation capability could increase the willingness of our leaders

^{72/}Proxmire hearings, op. cit. supra note 54 at 28.

^{73/}Sullivan, Roger J. et al, The Potential Effects of Crisis Relocation on Crisis Stability, System Planning Corporation, Arlington, Virginia, September 1978.

to permit nuclear war and could lead them to believe that a strategy oriented toward the fighting of nuclear war is a desirable strategy. . . . The suggestion that, because an evacuation program could reduce American fatalities from 100 million to a mere 50 million, that therefore those of us who favor such a program view with light-hearted eagerness the possibility of nuclear war, that suggestion would be in my view totally scurrilous if it weren't totally ridiculous.^{74/}

Nor does it appear that improved CD would lead the American people to support more adventurous policies. At any rate, the late-1978, national-sample opinion survey showed that the American people do not entertain optimistic or exaggerated ideas of the efficacy of civil defense. They saw blast shelters and crisis evacuation as resulting in some 64 and 56 percent survival, respectively^{75/} (as against about 90 and 80 percent, in the study for the Secretary of Defense). It scarcely seems likely, in view of these somber assessments, that even a \$60 billion blast shelter program would tend to make the American people--any more than their leaders--view with "eagerness the possibility of nuclear war."

In short, enhanced civil defense would be no more likely to "embolden [U.S. leaders] deliberately to expose the [U.S.] to a higher risk of nuclear attack" than would be the case for Soviet leaders, in the judgment of the Intelligence Community. Nor could U.S. civil defense "render a large-scale nuclear war anything but an unparalleled disaster" for the U.S., to quote ACDA's appraisal of the Soviet situation.

--Views on U.S. Civil Defense

Mr. Warnke drew very clearly the distinction between civil defense as an element in the strategic balance--an idea with which he strongly disagreed--and CD as a measure of insurance in an uncertain world. In his prepared statement he said:

As some modest insurance against the dread danger that deterrence may fail, some modest program aimed at improving

^{74/}Proxmire hearings (January, 1979), op. cit. supra note 54 at 28. In the less-restrained formulations of some in the arms control community, those expressing concern over the impact of Soviet CD on the strategic balance, or advocating improved U.S. civil defense, have been characterized as seeing nuclear war as "not much worse than a bad cold." Those of more hawkish persuasion have in turn contended that their opponents are victims of "the historical revisionism so trendy in the mid-1960s," and appear to believe that it is ". . . Western military institutions. . . that constitute the principal threat to world stability." Lehman, John, in "A Strategic Symposium: SALT and U.S. Defense Policy," 2 Washington Quarterly 37 at 38 (Winter 1979). There is little doubt that there are indeed significant differences in world view amongst those in the strategic community.

^{75/}Op. cit. supra note 31 at 28.

evacuation techniques may be justified. But this should be seen as a means of saving, perhaps, a somewhat greater number of lives and increasing the chance that some government may survive to help alleviate the chaos. But these reasons for continuing to fund something like the present civil defense program should not be distorted into a rationalization for a major expansion of civil defense as a necessary component in the overall strategic balance.^{76/}

This left unclear how modest he considered a "modest" program to be, but in testimony he said we ". . . might very well decide that it was useful to increase the amount of money that we spend on civil defense."^{77/} This would both provide some insurance against the failure of deterrence, and be useful in dealing with third country attacks, a terrorist threat or attack, or peacetime disasters.

He also said in answer to a question by Senator Proxmire that he would not see as provocative or destabilizing a U.S. program increased five-fold or indeed twenty-fold.^{78/} He did not see a U.S. civil defense program as being a matter of grave concern to the Soviets.^{79/} Thus, Mr. Warnke's views were by no means to the effect that the logic of assured destruction requires keeping people as well as capital wealth "hostage"--a view which has at times been ascribed, fairly or otherwise, to the arms control community. To the contrary, he stressed that humanitarian considerations would argue for reducing fatalities as much as possible should deterrence ever fail.

Later, on learning that Dr. Huntington was proposing a U.S. program averaging a little over \$200 million annually, Senator Proxmire remarked, ". . . I'm not sure you [and Mr. Warnke] are so far apart."^{80/}

Civil Defense and the Strategic Balance--A Recapitulation and Assessment

There is clearly something less than unanimity, in the strategic community, on the relationship between civil defense and the strategic balance. ACDA's view, as expressed by its Deputy Director, was that while CD may be a factor in the perception of the balance, it is vastly overshadowed in importance by the relationship of military forces.

PD 41 makes clear that the U.S. places "preponderant" reliance on its strategic nuclear forces to maintain deterrence. But PD 41 is also to

^{76/}Op. cit. supra note 54 at 10.

^{77/}Id. at 20.

^{78/}Id. at 12.

^{79/}Id. at 20-21.

^{80/}Id. at 37.

the effect that U.S. civil defense should enhance deterrence and stability, and reduce the possibility that the Soviets could coerce us during a crisis. Dr. Huntington agrees.

Mr. Warnke disagrees, and his views are probably a fair reflection of opinion in the arms control community. Indeed, some have been frank to say they have little concern, one way or the other, about the U.S. civil defense program, but that they take strong issue with what they believe to be gross overstatements, by persons outside the Government, of what Soviet civil defense can do. These overstatements are of course seen as one of a number of arguments advanced to oppose SALT II ratification.

--Uncertainties

In assessing the debate over CD vis-à-vis the strategic balance, it is essential to keep in mind that judgments cannot be made with certainty, or even at a high level of confidence, as to the factors or perceptions that could enter into the calculus of decision-makers during a future crisis, and might tend either to deter or encourage escalation. For example, uncertainties in assessing the views of current (or as yet unknown future) Soviet leaders would appear to include the following, among others:

- (1) What factors would contribute most significantly to deterring them from steps that would increase the severity of a crisis, and thus the possibility of escalation to limited or unrestrained use of strategic nuclear forces: The prospect of extensive destruction to their industries and cities? Of damage to the leadership, with decreased ability of the élite to maintain its position and control? Or the prospect of damage to Soviet military forces?
- (2) What might Soviet leaders see as being if not an "acceptable" level of damage, at least as "not unacceptable" damage during a crisis when the issues at stake were seen as critically important?
- (3) What would be their assessment of the correlation of forces, including all relevant political, military, and psychological factors? What, in this context, would be their assessment of the probable efficacy of their own civil defense measures?
- (4) To what degree do they give weight to estimates of relative postwar power, as between the two superpowers, and as between these powers and what are today lesser powers? What are their estimates of relative power following a large-scale nuclear exchange?

- (5) To what extent are Soviet leaders' perceptions and decisions affected by ideology? For example, might a belief that time and the forces of history are on their side influence them away from escalatory actions during a severe crisis? Or might their perceptions of the correlation of forces suggest assisting the forces of history?
- (6) What are Soviet leaders' views as to the rationality or predictability of the U.S.? Do they see U.S. leaders as being relatively sober, prudent, and cautious? Or do they see the U.S. as being sometimes unpredictable or prone to venture--as suggested by our escalation during the Cuban missile crisis, our bombing North Vietnam during the visit of a Soviet leader, or our alert during the 1973 Mid-East War? To what extent might Soviet leaders be influenced by the view that capitalism could lash out irrationally during its death throes?
- (7) How might Soviet decisions be influenced during an acute crisis by their views--whatever these might be--on the rationality of U.S. leadership? Might they, on the one hand, be inclined to prudence? Or might they be inclined, after weighing the correlation of forces, to make the preemptive attack whose value is emphasized in Soviet military literature, on the basis that one must attempt to foil the schemes of the aggressor (as Stalin so signally failed to do in 1941, an omission well remembered by Soviet leaders)?
- (8) How might decisions be influenced by Soviet leaders' perceptions of impending instabilities or vulnerabilities affecting the USSR (for example, a petroleum shortage, the nationalities problem, escalating discontent in Eastern Europe, or a perceived threat in the Far East)?

In short, as Secretary of Defense Brown has pointed out, "What counts in deterrence. . . is not only what we may believe, but also what Soviet leaders may believe."⁸¹ Judgments are inescapably attended by uncertainty.

--Catastrophic Failures of Judgment in the Twentieth Century

National leaders, in this century, have made decisions on what is now called escalation, and on issues of peace and war. Many such decisions proved successful. Others were based on miscalculations or misperceptions, and had disastrous consequences:

- (1) In 1914, the leaders of the Austro-Hungarian, Russian, and German empires made miscalculations whose combined effect was disaster--the dissolution of the three empires, and the subsequent rise of Bolshevism, Facism, and Naziism.

⁸¹Op. cit. supra note 24.

- (2) In 1939, Hitler attacked Poland, though it appears he calculated (mistakenly) that he had good chances of achieving his objectives without triggering World War II, based upon his earlier successes. In 1941 he attacked the USSR, anticipating the destruction of Bolshevism and not, eventually, of the Third Reich.
- (3) In 1941 the leaders of Japan attacked the U.S., not anticipating the defeat of the empire in 1945.

--Churchill's Views on Crises

Churchill's observations on the crises which preceded the first World War are germane. He wrote as follows of the Agadir crisis of 1911, one of several the powers of Europe had surmounted--before the catastrophe of 1914:

One must think of the intercourse of the nations in those days not as if they were chessmen on the board but as prodigious organizations of forces active or latent which, like the planetary bodies, could not approach each other in space without giving rise to profound magnetic reactions. If they got too near, the lightnings would begin to flash, and beyond a certain point they might be attracted altogether from the orbits in which they were restrained and draw each other into dire collision. . . . [A]s long as there was no conscious or subconscious purpose of war in the mind of any power or race, diplomacy would probably succeed. But in such grave and delicate conjunctions one violent move by any party would rupture and derange the restraints upon all, and plunge Cosmos into Chaos.^{82/}

And:

[The Germans] meant to test the ground; and in so doing they were prepared to go to the very edge of the precipice. It is so easy to lose one's balance there: A touch, a gust of wind, a momentary dizziness, and all is precipitated into the abyss.^{83/}

--July, 1914: The Environment of Crisis Decision-Making

The tempo of events during an acute crisis, the gravity of the issues, and the strain resulting, do not assist in making accurate judgments or sound decisions. The situation in July, 1914 has been described as follows:

During the succeeding fortnight of almost sleepless days and nights, the fatigue and mental demands were far greater. . . .

^{82/}Churchill, Winston S., 1 The World Crisis, Charles Scribner's Sons, New York, 1923 at 41.

^{83/}Id. at 46.

Not only in St. Petersburg, but everywhere in the Foreign Offices of Europe, responsible officials now began to fall under a terrible physical and mental strain of overwork, worry, and lack of sleep, whose inevitable psychological consequences are too often overlooked in assessing the blame for the events which followed. But if one is to understand how it was that experienced and trained men occasionally failed to grasp fully the sheaves of telegrams put into their hands at frequent intervals, how their proposals were sometimes confused and misunderstood, how they quickly came to be obsessed with pessimistic fears and suspicions, and how in some cases they finally broke down and wept, one must remember the nerve-racking psychological effects of continued work and loss of sleep, combined with the consciousness of the responsibility for the safety of their country and the fate of millions of lives. (Emphasis added.)^{84/}

--Perils of the Eighties: Views of Dr. Huntington, Gen. Goodpaster, and Dr. Kissinger

It is possible that the consequences of thermonuclear war are so obviously immense if not shattering, and would be so nearly instantaneous, that few useful lessons can be drawn from the history of earlier failures of judgment in 1914, 1939, or 1941. But the Cuban missile crisis did occur in 1962, and the actions of the U.S. would not seem to have been anticipated by Khrushchev when he set in motion the actions which culminated in the crisis.

It would be imprudent to assume that confrontations cannot or will not arise in the future, out of situations which cannot be clearly foreseen in all of their aspects and dimensions. Dr. Huntington observed at the 1979 hearings that:

[A]s Soviet military power has grown relative to our own, our abilities to deter war, to influence the probability of nuclear war, and to limit the destructiveness of nuclear war to American society have all declined. While people may differ as to the probabilities of their occurring, no one can guarantee that the United States and the Soviet Union will not be involved in a nuclear crisis, a limited nuclear exchange, or even an all-out nuclear war sometime between now and the end of this century. The possibilities of these events happening are all too real.

These real possibilities do not, moreover, necessarily rest on the assumption of evil, reckless, or aggressive leadership in the Kremlin--or in the White House. Such leadership

^{84/}Fay, Sidney B., 2 The Origins of the World War, MacMillan, New York, 2d ed. 1928-1930 at 288-289.

[does not have to emerge]. . . for those probabilities still to be serious. Some combination of miscalculation, communications failure, inability to understand the other side's motives, a little political short-sightedness, and some bad luck can all too easily produce a pattern of action and reaction from which neither side can escape and which leads to disastrous consequences neither side wants. (Emphasis added.)^{85/}

Dr. Huntington also said he did not believe the Soviets would ". . . willingly attempt to use or resort to nuclear war unless they felt that the very survival of their system was at stake."^{86/} He added, however, that he felt they might risk the massive and unprecedented destruction of nuclear war if the choice was between that and tolerating a change in the situation in central Europe with respect to East Germany or Poland: "I think that they feel that their entire position in the world, the viability of their political system, depends upon their maintaining control in Eastern Europe. . . ."^{87/}

Lt.Gen. Andrew J. Goodpaster has also pointed out that, "The Soviets are far more sensitive about crises threatening their homeland than about crises threatening other areas of the world. They are deeply concerned about any potential threat to Russia as a national entity, to the Communist authority, or to the survival of their strategic nuclear forces."^{88/} These views suggest that the Soviets might be less likely to run serious risks to achieve advantage in other areas (e.g., the Persian Gulf) than in dealing with situations they saw as directly threatening to their regime.

In February 1979, former Secretary of State Kissinger said that ". . . [W]e could be heading into a period of maximum peril." (Emphasis added.) With or without SALT, he did not see, in the period 1980-1987, an adequate emphasis on U.S. counterforce capability. Thus:

[F]or a period of five to seven years the Soviets may develop an advantage in power useful for political ends. . . .

[T]he Soviet Union may perceive a period in which, though its political and economic instabilities are latent but not yet overwhelming, its military power is potentially dominant.

^{85/}Proxmire hearings (Jan. 1979), op. cit. supra note 54 at 33.

^{86/}Id. at 36.

^{87/}Id. at 43.

^{88/}Op. cit. supra note 73 at 119.

If it is not used in that period, the Soviets' long-term fate is extremely uncertain. (Emphasis added.)^{89/}

In general, it seems clear that the willingness of national leaders to run risks even in the thermonuclear age has been and will be influenced, on the one hand, by the perceived importance of the stakes at issue and by their perceptions, on the other, of the outcomes of conflict. If supreme political interests are at stake, this may warrant the risk of war. (The issues at stake in July 1914 were by no means supreme; in the judgment of many they were almost trivial.)

--Civil Defense and the U.S.-Soviet Strategic Balance

Assessments of the role of civil defense in perceptions of the correlation of forces are inherently speculative. There is not now and will likely never be any way to arrive at highly confident judgments as to what part various perceived civil defense capabilities would play in specific crisis situations. There seems little doubt that decisions would be made by all parties on the basis of all capabilities involved--conventional through strategic offensive and defensive--and also on the basis of their perceptions of the opponent's willingness to employ forces.

It is certainly conceivable that CD capabilities, and actions taken to generate CD readiness (such as crisis evacuation), could affect perceptions including those of willingness to act. In particular, the current lack by the U.S. of significant civil defense could quite possibly contribute in some degree to Soviet perceptions, or misperceptions--and calculations, or miscalculations--in a crisis.

We are unsure as to what confidence Soviet leaders may now or in the future place in the effectiveness of their civil defenses, should these be put to the test. They could, however, have enough confidence in their CD--whether misplaced or not, and in the context of the other elements of the correlation of forces--to increase their willingness to take risks during a crisis, if political issues of vital or supreme importance to them were at stake. This could be so particularly if U.S. civil defense is not improved.

^{89/}Atlanta Constitution, Feb. 11, 1979, p. 1C. Shortly thereafter he observed, in answer to a question as to whether in the longer run history was on the side of the USSR or of the West, that ". . . [H]istory is clearly against the Soviet system. . . . It is this that gives the 1980's their particular urgency. . . . [If the West could generate an organizing strategy and will]. . . the Soviet geopolitical position would become precarious, and it would then be compounded by the disintegrating tendencies within the Soviet system, even though they may take another decade or so to develop. All of this makes the early 1980's a time of potential danger but also of opportunity, depending on how we react to the clear outlines of the future." (Emphasis added.) The Economist, Feb. 10, 1979, p. 31.

In short, real or perceived asymmetries in civil defense, and thus population vulnerability ". . . could be politically destabilizing. Soviet leaders might be led to conclude that the U.S. would rather avoid the risk of nuclear war than expose its unprotected population to devastating destruction. Or, Soviet leaders might overestimate the effectiveness of their civil defense capabilities and underestimate U.S. resolve."90/

It is quite conceivable, moreover, that the current lack of civil defense could be an inhibiting factor in U.S. decision-making at the more intense levels of crisis. As Dr. Huntington and others have observed, an American President would not be in an enviable bargaining position if, during a crisis, Soviet leadership and population were substantially protected and if our own were highly vulnerable.

One can therefore hope, but need not necessarily agree, that Mr. Warnke is correct in his contentions that Soviet leaders "must" recognize that CD can contribute nothing towards making nuclear war a usable instrument of policy, and that it is not a significant factor even in perceptions of the strategic balance. And it is essential to keep in mind what is too often ignored in the debate on CD vis-à-vis the strategic balance, that the Soviets do not view civil defense as their first and only defense against a U.S. retaliatory strike. It is but one element of a secondary line of defenses, the first line of defense being to deter use of U.S. retaliatory forces.91/

In summary, no one can "prove" that civil defense is a significant element in the U.S.-Soviet strategic balance--or that it is not. It is primarily a matter of perceptions, or more accurately, of speculations as to future perceptions. Indeed, should an acute crisis actually occur in the future, it is quite possible that even those directly involved would not later have uniform views as to what role perceptions of civil defense had played in crisis decision-making.

Most, however, in the defense and civil defense communities would agree with Dr. Huntington's view, that:

Simple prudence dictates that the United States should not attempt to cross the uncertain and troubled waters of the 1980's without the capability to evacuate its urban population in the event of catastrophe.92/

90/Senate Comm. on Foreign Relations and House Comm. on Foreign Affairs, Fiscal Year 1980 Arms Control Impact Statements, 96th Cong., 1st Sess. (Jt. Comm. Print, March 1979) at 91.

91/T.K. Jones and W. Scott Thompson, op. cit. supra note 62 at 701-702.

92/Op. cit. supra note 54 at 35.

Many in the arms control community might go that far with Dr. Huntington, even though their deep (and understandable) concern for SALT II ratification leads them to resist assertions that Soviet CD could be effective, or that civil defense could play any significant role even in perceptions of the strategic balance.

--Presidential Decision 41

At all events, the PD 41 policies lay it down clearly that U.S. civil defense should ". . . enhance deterrence and stability, and contribute to perceptions of the overall U.S./Soviet strategic balance and to crisis stability, and also reduce the possibility that the Soviets could coerce us in times of crisis." There is to be no change ". . . in the U.S. policy of relying on strategic nuclear forces as the preponderant factor in maintaining deterrence."

It is certainly clear that PD 41 is not based on the premise that population vulnerability is either irrelevant or a positive virtue. To the contrary, it is plainly based on the view that real or perceived asymmetry in vulnerability could be politically destabilizing.

The PD 41 policies should have put to rest debates within the Executive Branch, but debate will no doubt continue elsewhere.

Civil Defense and the Cuban Crisis

There is a final point worth making with respect to civil defense and crises. In a 1978 interview, Steuart L. Pittman, who was Assistant Secretary of Defense for Civil Defense in 1961 to 1964, pointed out:

[I]t is interesting that President Kennedy personally raised the civil defense question during the Cuban crisis. He was considering conventional military action against Cuba to knock out the missile sites. I understand he was the only one of the "Committee" to raise the issue of civil defense, which tells us something. He asked whether it would be practical to evacuate Miami and other coastal cities in Florida. . . . I was called into the marathon crisis meeting and had to tell him that it would not be practical; we did not have any significant evacuation plans. . . . The President dropped the idea, but shortly after the crisis was over, his personal concern over his limited civil defense options led him to sign a memorandum directing a significant speedup in the U.S. civil defense preparations. (Emphasis added.)^{93/}

While history seldom repeats itself exactly, it does indeed "tell us something" that in the only overt nuclear confrontation the world has

^{93/}Op. cit. supra note 73 at 152-153.

yet seen, the American President was concerned about civil defense--and that the idea of population relocation during the crisis was one of his specific concerns. Certainly it is clear that in 1962, the notion of vulnerability being stabilizing held little attraction for the Chief Executive. And as outlined below (in discussion of CD and SALT), the notion that vulnerability is desirable has never commended itself to Soviet leaders.

Congressional Action on the FY 1980 Budget

The FY 1980 budget request for civil defense, as noted earlier, was for \$108.6 million--a six percent real increase over the FY 1979 level, which is an all-time low, in constant dollars. The FY 1980 request was represented as an initial step, albeit a modest one, towards implementing both the President's PD 41 policy decision and the program decision of the Secretary of Defense.

The House Committee on Appropriations, however, reduced the request to \$100.6M. The Committee's report first discussed the Secretary's decision to adopt a program emphasizing crisis relocation, with annual costs averaging \$230M in FY's 1980-1984, and with the initial year estimated to cost \$140M. It then explained the decision to reduce the request:

The 1980 request has been represented as a small significant step, restrained by budget priorities, to redirect civil defense efforts in the manner envisioned by the Secretary's program decision.

Agency officials, in testimony before the Committee, stated a funding level of \$140,000,000, or even the requested \$108,600,000, is not warranted unless there is a firm commitment to a costly, multi-year redirection of the program. The Committee does not believe that either the Congress or the Administration has yet demonstrated adequate support for a restructured civil defense policy. In the absence of a multi-year authorization or significantly increased budget request, the Committee recommends funding civil defense activities at the 1979 level. (Emphasis added.)^{94/}

The Committee's view on the lack of adequate Administration or Congressional support was not without validity. But the Committee's recommended \$100M would not in fact continue funding at the FY 1979 level. Rather, an appropriation at that level would represent a real decrease of perhaps

^{94/}House Committee on Appropriations, Department of Housing and Urban Development--Independent Agencies, Appropriation Bill, 1980, H. R. Rep. No. 96-209, 96th Cong., 1st Sess. (June 1979) at 33.

two percent, setting yet another all-time low record. A \$100M appropriation would preclude even a gesture at starting on the program adopted by the Secretary of Defense.

Representative Donald Mitchell (New York, who had served on the 1976 House Armed Services CD panel) attempted on June 22, 1979 to amend the appropriations bill on the floor of the House, to provide \$138M for the first year of a comprehensive program. The attempt failed, however. The appropriations bill was brought on for debate on a Friday afternoon, and a number of members who had said they would support Mr. Mitchell's amendment had left to visit their districts.

The points made on both sides were familiar to those who had followed the civil defense debate. Mr. Mitchell said that:

[If the Soviets] can protect their citizens from our weapons and we cannot protect our citizens from their weapons it is as though they have far more weapons and their civil defense system makes a mockery of the strategic balance. It simply does not exist anymore.

No one knows precisely how well the Soviet civil defense system would work but. . . they are trying at least 10 times harder than we are. . . . If they even perceive that their system is excellent, even if it is not, it is dangerous for us. . . .

. . . . When it comes to casualties, we win big. . . [T]hey would lose about 10 million of their citizens and we would lose something like 140 million Americans. . . .

We have heard a great deal about Three Mile Island lately. . . . We have witnessed the confusion, the fear, . . . the lack of preparation, lack of planning. This is just a tiny example of what would not exist if we had a good civil defense program for our country.

. . . I cannot believe we are going to delay another year in our effort. [Civil defense offers] the best cost-benefit ratio we have ever had.^{95/}

Members speaking in opposition reiterated that there was no multi-year proposal or scheme to provide for a comprehensive CD program. Others contended that crisis evacuation was absurd; or that the fortunate people would be those killed instantly in a war, because the survivors would die from starvation or radiation; or that it was ridiculous to consider additional funds until FEMA has been organized.^{96/}

95/125 Congressional Record H5012 and 5013 (daily ed., June 22, 1979).

96/Id. at H5013-5015.

The debate on the House floor thus did not include any of the more esoteric theories that have figured in the debates involving defense analysts--the doctrine of mutual assured destruction, whether U.S. civil defense "would threaten Soviet assured destruction," and so on--many of which boil down to the notion that civil defense might work too well, or at any rate might be perceived as working too well. To the contrary, some at least of the opponents took their stand on the position that it wouldn't work well at all.

The defeat of the Mitchell amendment was probably due as much as anything to the general disinclination of Members, in June of 1979, to make a commitment to greater spending for any purpose. Few floor amendments to raise appropriations are successful, and even fewer than usual have been approved recently. At all events, the debate in the House on June 22 was probably a not inaccurate reflection of the reactions that would be elicited should the Administration propose a significantly increased budget for FY 1981. (Annex "A" to this paper summarizes objections that have been raised to civil defense in terms of a life-boat analogy, and the response of Dr. Huntington.)

At the time of the June 1979 debate, the House Committee on Armed Services had before it a bill, sponsored by Representatives Ike Skelton (Missouri), Donald Mitchell and two others, which would provide precisely the multi-year authorization whose absence was noted by the Appropriations Committee. This bill^{97/} would amend the Federal Civil Defense Act to add a new title which would include (1) a Congressional finding that a new civil defense program should be implemented to give effect to the PD 41 policies (which would be specified as part of the Act); (2) an outline of the program elements required (shelter surveys, crisis relocation planning, improvements in capabilities for warning, direction and control, radiological defense, and emergency public information); and (3) authorization for the funds required for a comprehensive program on the lines of the one adopted by the Secretary of Defense.

The funding authorization would rise from \$146M for FY 1980 to \$393M in FY 1985, and \$375M in FY 1986. The sums were in FY 1979 dollars, and adjustments for inflation were to be made each year.

At the time of writing (July 13, 1979) there has been no indication of Senate action on the FY 1980 budget request, but it is unlikely that the Senate will raise the House figure much if at all. Nor is there any indication of whether action will be taken on the Skelton-Mitchell

^{97/}H.R. 2704, 96th Cong. 1st Sess. (1979). Mr. Mitchell had also introduced a bill in 1979 to provide a seven-year authorization for civil defense, H.R. 571, 96th Cong., 1st Sess. In 1978, he had introduced a similar bill, to authorize a seven-year comprehensive CD program, which was described in detail, 124 Cong. Rec. H1672 at 1676 (daily ed., March 3, 1978). Mr. Mitchell's comprehensive program was essentially the same as program D in the System Planning Corporation study, *op. cit. supra* note 28, but funded over a period of seven years rather than five. The first five years of the Mitchell program were also essentially the same as program "D-prime," selected for implementation by the Department of Defense.

bill to amend the Act and provide a multi-year authorization. However, the House action on the FY 1980 appropriation is thought to have made prospects for the authorization bill modest at best.

It therefore seems likely that the FY 1980 appropriation will be \$100M. This raises two questions: (1) What civil defense capability can be obtained for such a figure; and (2) what are FEMA's options for FY 1981?

What Civil Defense Can \$100M Buy?

OMB's view is quite clearly that the CD program should be funded at a level in the neighborhood of \$100 or \$110M--much less than the costs for the program adopted by the Secretary of Defense, averaging \$230M annually for the first five years. The issue is whether a program funded at the \$100 or \$110M level could implement the policies laid down in PD 41, of enhancing deterrence and stability, and reducing the possibility of Soviet coercion, by providing crisis evacuation capabilities.

--"Paper Plans Only" for Crisis Relocation

A program at about the \$110M level could provide for continuing crisis relocation planning at the present modest level, involving some 140 Federally-funded planners nationwide, hired under Federal-State contracts. This level of effort would not, however, result in completion of even modestly detailed plans for the entire country until around 1990. Nor could such a program provide for exercising the plans with the local and State officials who would be responsible to execute them during a crisis, or for improving current marginal capabilities in such areas as Direction and Control, Warning, Communications, Radiological Defense, Emergency Public Information, and training.

The program adopted by the Secretary of Defense would, by contrast, include many elements beyond planning per se, and indeed such plans would account for only about 10 percent of the total program cost. The 90 percent balance would be devoted to exercising, to improving the supporting systems just enumerated, to research, and to support of the local and State civil preparedness structure.

A current DCPA research project is making an intensive analysis of what capabilities would result from a program of the OMB type, to produce "paper plans only" for crisis evacuation, as opposed to a program providing for supporting systems and capabilities as well. The analysis is far more detailed than the approaches that have been used for the past two decades to evaluate nuclear attacks and the effectiveness of civil defense. The latter are simple or even simplistic in principle, even though the computational techniques involved are complex: The population is assumed to be in a specified protective posture which is deemed reasonable, involving some combination of shelter and evacuation; one or more assumed attacks are applied to the protected population; and injuries and fatalities are calculated.

As Dr. Huntington pointed out, the results of such analyses can be changed significantly by varying the assumptions used. Calculated fatalities are sensitive to assumptions on such factors as the percentage of city population evacuated, the level of fallout protection available for evacuees, the blast protection available for those still in cities at the time of attack, and of course the weight and nature of the attack. Thus, controversies over whether U.S. retaliation would cause 5, 10, 25 or 35 million Soviet fatalities are at bottom controversies over the reasonableness of the assumptions used.

The approach being developed for DCPA represents a striking advance over techniques used hitherto. Rather than simply assuming that X percent of the urban population have been evacuated, or that Y or Z percent of the population are in shelters providing specified levels of protection, the new approach is based on highly detailed modelling of the survival process. The model considers the contribution to casualty reduction of a large number of program elements, both individually and in concert with other elements.

Thus, effective Direction and Control of operations can improve survival by: providing instructions to urban residents to evacuate; control of traffic operations during evacuation; instructing the population to assume and maintain a maximum protective posture against fallout and (in risk areas) blast; directing various operations to support the sheltered population; and directing remedial movement and other post-shelter actions to reduce survivors' exposure to residual fallout radiation. The model considers these functions of Direction and Control in conjunction with other systems and capabilities, for example, police capabilities for traffic control, means to broadcast emergency information to the public, communications to shelters, and a trained shelter management organization. The model also considers explicitly such factors as human behavior, and the effects of adverse weather on evacuation.

--"Paper Plans Only" and PD 41

While work is still underway, preliminary results in a draft report^{98/} show that "paper plans only" for crisis evacuation will not provide civil defense performance that can purport to implement the PD 41 policies.

Over a range of attacks, the program approved by the Secretary of Defense would nearly double the survival afforded by a program at about the current level, which did not include any attempt to develop crisis evacuation plans. "Paper plans only" for crisis evacuation, by contrast, would provide at most a 15 to 20 percent improvement over the current program.

^{98/}Strope, Walmer E. and John F. Devaney, Effectiveness of Civil Defense Systems (draft), Center for Planning and Research, Palo Alto, California and Washington, D.C., June 1979.

Thus, the "plans only" program does not improve performance significantly over that of a program of the current type. This poor performance results from lack of exercising and lack of the Direction and Control, Radiological Defense, and other systems outlined above--all of which are needed to realize the full lifesaving potential of crisis evacuation.

Absolute levels of survival would depend, of course, on the attack assumed and on the details of evacuation planning. For two "design-level" mid-1980's attacks analyzed in the current study, U.S. survival with paper plans only for evacuation would be about 50 percent--as contrasted to 80 to 90 percent for the USSR in the ACDA study, and even higher survival according to analyses by the Intelligence Community and T.K. Jones. This is patently a "marked asymmetry" in population vulnerability.

The DoD-approved program, however, resulted in survival not much less than that for the USSR. For the two design-level attacks analyzed in the study, survival averaged some 80 percent, about the same as in the earlier study for the Secretary of Defense.

It is evident that a program providing only for paper plans cannot give effect to the PD 41 policies. No U.S. civil defense program resulting in survival of only half the population can have any effect on the strategic balance, either real or perceived. Nor can it provide any basis for reducing the "possibility that the Soviets could coerce us" during a crisis.

FY 1981--Options for FEMA

The United States now has policies making civil defense a factor to be considered in assessing the strategic balance. It has not yet started on a program which could give practical effect to these policies. The program approved by the Secretary of Defense would implement the PD-41 policies, but a program at the \$110M level could not--and would indeed set at naught the Presidential policies for U.S. civil defense.

The issue for FEMA would appear to be straightforward--either to attempt to commence the DoD-approved program a year later than planned (and to complete it as originally planned, in FY 1986), or to recommend a program on the order of \$100 or \$110M which would however make a nullity of the PD 41 policies. Of course, even if FEMA were to recommend a start on a program to implement PD 41 (estimated at roughly \$175M for FY 1981), it is by no means clear that this would be approved by OMB or (if not reduced by OMB) that it would be approved by the Congress.

Should no start be made on a strategically meaningful program in FY 1981, by reason either of decision within FEMA or later action by OMB or Congress, there is one option which should be pursued. This is to develop "mobilization-oriented" CD packages.

This would involve developing several rather high-cost options for doing as much as possible in 8, 12, or 16 months, for approval and implementation following an event which had changed the outlook both of decision-makers in Washington and of the country at large. Such an event might be an acute crisis which had been resolved on unsatisfactory terms.

DCPA has a project underway to develop concepts for such CD mobilization packages. One option would be to complete as much of the DoD-approved program as possible in a year, more or less, of markedly increased tension. The objective would be to develop crisis evacuation plans and supporting capabilities, for use should an acute crisis occur about a year after the original precipitating event. The costs involved might be on the order of \$1 to \$2 billion.

A second option--to be added to the first--might be to attempt to develop blast protection in cities, to the extent possible over a period of about a year. One approach would be to suspend all highway construction and redirect this effort to constructing blast shelters. Costs could approximate \$10 billion.

A third option would be to make preparations, during the year's period of intense activity, to prepare habitable mines for use as shelters. There are large amounts of space in limestone and other high-quality mines, in most parts of the U.S. Although few mines are in or close to metropolitan areas, many are close enough that given several days of acute crisis, people could reach them. In almost all cases, however, substantial work would be needed to provide access roads and parking; improve access into the mine itself; provide emergency power, ventilation, and lighting; and provide water, food, and other life-support.

Each of the mobilization packages would include emergency appropriations bills, standby contracts, and other preparations aimed at minimizing start-up time. The difficulties involved in a scheme to improve CD capabilities markedly in a period of a year, by the expenditure of billions, will not be underestimated by those familiar with government procedures in normal times--when months are consumed in filling a few personnel vacancies, or awarding contracts totalling a few millions of dollars. The project, however, will examine extraordinary approaches, such as the "Schedule A" hiring procedures used to staff the Census effort each decade.

It is still too early to tell, but it is possible that the project will outline approaches offering some degree of confidence that CD could in fact be improved fairly rapidly by large expenditures in a short period of time. Civil defense program managers will likely remain skeptical, in view of the immensity of the task, even assuming that funds had been made available and there was a sense of urgency throughout the country.

There is an historical precedent for a relatively rapid buildup of CD capabilities. At the time of the 1938 Munich crisis, Britain had developed civil defense plans but had little capability for actual operations. Spurred by the belief that war had become not only not unthinkable but not unlikely, Britain mounted an intensive effort.

By the time Germany attacked Poland the next September, the British were able to evacuate 1.5 million women and children from major target cities. And by the time of the August 1940 "blitz," the CD system was able to contribute substantially to Britain's ability to "take it" and to continue the war.

The fact that Britain had nearly a year to develop its civil defenses between Munich and the outbreak of the war, and nearly another year before the 1940 attacks on London, does not, of course, mean that the U.S. would necessarily have a like period of time, in an analogous situation, to develop much more comprehensive civil defense capabilities. Nor would many choose to be in a situation like Britain's at the time of Munich--or to experience a similar crisis outcome. But the British experience does suggest that civil defense can be significantly improved, on an accelerated basis, if there is sufficient time and sense of urgency.

The fundamental point, however, about an approach based on CD "mobilization" packages is that they could not--even if they had promise of proving effective in practice--be represented as implementing the PD 41 policies. These call for having CD capabilities in being able to reduce the possibility of Soviet coercion during a crisis--not a year later. Nonetheless, it would seem only prudent to develop such packages should a start not be made in FY 1981 on a program to implement PD 41. In fact, the mobilization packages should be developed even if an enhanced program is begun, to hedge against the possibility of a traumatic event occurring before completion of the program in the mid-1980's.

For a "mobilization" approach to have any prospects of proving effective in a period as short as a year, it would be essential to maintain the modest capabilities and organizations now in being, in such areas as shelter surveys, crisis relocation (evacuation) planning, and Radiological Defense. These groups would provide, as it were, the seed for a nucleus for a cadre to develop CD capabilities on a rapid-mobilization basis.

Public Opinion, Civil Defense, and Crises

The late-1978 national opinion survey outlined earlier shows conclusively that while the American public think little about civil defense in normal times, they continue to indicate approval at high ("consensus") levels when asked. Moreover, it appears that they believe their governments are "taking care of" civil defense. At any event, the average estimate

of civil defense expenditure was \$1 billion annually (an overestimate by a factor of ten).^{99/}

While the public is passive with respect to civil defense during periods of low tension, public opinion can be quite volatile when aroused by international events. It seems likely that the state of a country's civil defense capabilities could have a significant effect upon its own population during a crisis, with respect to their perceptions, anxieties, and quite possibly behavior.

No one can predict with full confidence the state of mind or the behavior of the American people during a crisis so severe that, for example, Soviet or U.S. city evacuation might be considered or undertaken, limited nuclear strikes considered, or ultimata regarding full-scale attacks issued, for no crisis of such severity has yet occurred. Nevertheless, experience in lesser crises and a substantial body of research results provide significant insights and some basis for judgments.

--The Berlin and Cuban Crises

During the period of the 1961 Berlin Crisis, for example, what is now remembered by some as a great debate on civil defense occurred, including what are remembered as rather lurid press stories, such as speculations on defending shelters with guns and the like. Experience at the time, however, and research then and later^{100/} showed that no measurable fraction of the population attended to the so-called debate.

A substantial segment of the public did take a reasonably serious and intelligent interest in civil defense, with the objective of learning what could be done to protect themselves and their families should an attack occur. This desire for knowledge, in addition to its intrinsic merit, served the purpose of alleviating anxiety. The world was seen, at least for some period, as a potentially more hostile place, and people were doing what they could to enhance their prospects for survival should the worst in fact occur.

During the more intense Cuban crisis in 1962, local and State civil defense offices were flooded with rather serious, purposeful, and specific inquiries, on the lines of "Where is a shelter available to me and my family?"

^{99/}Op. cit. supra note 31 at 78.

^{100/}Garrett, Ralph L., Civil Defense and the Public: An Overview of Public Attitude Studies, Defense Civil Preparedness Agency, Washington, 1976 at 17 and 35.

--Civil Defense in Possible Future Crises

It thus appears not unlikely that should an extremely severe crisis find the U.S. as unprepared to protect its population as is the case at present, there could be significant or serious reactions on the part of the population. It is certain that there would be demands for specific survival advice and instructions by the bulk of the public. There could in addition be a range of less desirable behavior, although this is somewhat more speculative.

It is certainly not inconceivable that if, for example, Soviet cities should be evacuated at the height of the crisis but no plans or capabilities existed to do the same here, pressures could be brought to bear on the U.S. government not only to do something to protect the people but possibly to accept an unfavorable outcome in view of our obvious unreadiness to protect the country. During the Cuban crisis, which was public only for a matter of six days, Governor Rockefeller and members of the Governors' Conference committee on civil defense met with President Kennedy to ask what was being done to protect the population should the crisis escalate to attack.

If, on the other hand, a severe crisis found the U.S. with a good state of civil defense preparedness, including the ability to evacuate cities if required, substantially more constructive response by the American people and by local and State officials would be probable. The normal tendency to close ranks in times of stress would probably predominate, and there would likely be few centrifugal tendencies arising out of the perception that the country had no preparedness for attack. It is probable that the actions recommended to enhance individual prospects for survival (e.g., developing fallout protection in homes, possibly evacuating cities) would not only absorb the energies of the people but would have the side effect of alleviating anxieties in some degree, by giving most people the feeling that they were taking useful actions to improve survival prospects.

It does not appear likely that the Soviet government would have parallel concerns, for at least two reasons: Few Soviet citizens resist government policies actively nor is great attention paid to those who do. In any case, the Soviets have a substantial level of civil defense preparedness, and the Intelligence Community study found that while much of the public is apathetic or skeptical today, they would respond to official directions in time of emergency.^{101/} Moreover, most Soviet citizens know what things they should do to substantially enhance their survival prospects, as a result of the training which nearly all have received.

Should a severe crisis have found the U.S. unprepared, it is virtually certain that the Administration of the time would afterwards

101/Op. cit. supra note 25 at 8.

be called to account for its omissions and those of its predecessors. Following the Munich crisis, which found Britain as unprepared in civil defense as in all other areas of defense, the working of the civil defense services was reviewed by the House of Commons during a censure debate:

Members were in a worried and critical mood, and among the charges made it was maintained that the Government had neither policy nor plans for evacuation when the country was on the verge of war. . . . [T]here was much uneasiness in Whitehall.^{102/}

In short, there will be no public outcry for civil defense in normal times. There will be modest political profit, if any, for an Administration proposing enhanced civil defense, or a Congress approving it; the subject is not a congenial one. But should a frightening crisis find civil defense in disarray, the people (and the Congress) would surely demand to know what had been done in "the years that the locust hath eaten."^{103/}

Summary

The PD 41 policies provide that the U.S. civil defense program should enhance deterrence and stability, and reduce the possibility of Soviet coercion during a crisis. The program approved by the Secretary of Defense would implement these policies, but a program at the \$100 or \$110M level could not--nor could standby arrangements for a high-cost CD "mobilization" to be undertaken after a crisis or other event that had changed the country's outlook.

The DoD program is not expensive, involving expenditure of a little over one dollar per capita annually--as contrasted to some eight dollars per capita in the USSR. Thus it does not seek to match the Soviet program in expenditure, but it could offer survival levels not greatly below those estimated for the USSR.

* * *

A Postscript on Two Ancillary Issues: Civil Defense and SALT, and "Dual-Use"

There are two additional issues that may be discussed by way of a postscript. One is the outlook for U.S.-Soviet agreement to limit civil

^{102/}Titmuss, Richard M., Problems of Social Policy, HMSO, London, 1950 at 30.

^{103/}Joel 2:25. This phrase, according to Churchill, was used by Sir Thomas Inskip in referring to the period 1931-1935: The Gathering Storm, Houghton Mifflin, Boston, 1948 at 66.

defense via the SALT process. The other has to do with the much-agitated issue of "dual-use," the extent to which the civil defense program can or should contribute to readiness for peacetime as well as attack emergencies.

--Civil Defense and SALT

In March 1977, President Carter said the U.S. had agreed with the Soviets, in the context of SALT, to establish eight study groups to discuss areas in which future agreements might prove feasible. One dealt with foregoing development of anti-satellite capabilities, another with a comprehensive test ban, and another with civil defense:

And the eighth study group that we agreed to establish is to study the means by which we could mutually agree on foregoing major efforts in civil defense. We feel that the Soviets have done a great deal on civil defense capability. We've done a less amount, but we would like for both of us to agree not to expend large sums of money on this effort.^{104/}

Soon after, the President again noted the ". . . problems that relate to excessive expenditures on civil defense."^{105/}

In May, however, the Washington Star reported that an official had said that until there was some clarity in the Administration's thinking on civil defense, it was not possible to discuss it with the Soviets.^{106/} A year and a half later, in November 1978, the Star reported that the Kremlin was unwilling to discuss civil defense limitations, and had rejected a U.S. proposal to include CD in the joint statement of guidelines for SALT III. Accordingly, the Administration had given up attempts to get the USSR to negotiate limits on CD (and air defenses) after 1985.^{107/}

At the January, 1979 Proxmire hearings, Mr. Warnke said that CD and air defense had been raised as prospective issues for SALT III, but gave no indication of Soviet reaction.^{108/} The FY 1980 Arms Control Impact Statement on civil defense says that as of February 1979, the U.S. had deferred discussion of CD in arms control forums.^{109/}

^{104/} 13 Presidential Documents: Jimmy Carter, 1977 at 470 (March 30, 1977).

^{105/} Id. at 484 (April 3, 1977).

^{106/} Washington Star, May 15, 1977, p. 5.

^{107/} Washington Star, November 16, 1978, p. 9, and November 22, 1978, p. 4.

^{108/} Op. cit. supra note 54 at 20.

^{109/} Op. cit. supra note 90 at 90.

If the Soviets ever should agree to discuss limitations on civil defense, there would obviously be difficult problems as regards verification. Civil defense preparations are inherently of low visibility--witness the debate on whether they have either plans or capabilities to undertake crisis actions, on a wide scale and effectively, for hasty hardening of industrial equipment. Also, it scarcely seems likely that they would agree to brick up or demolish the more than 15,000 blast shelters the Intelligence Community credits them with having built. Nor, in the unlikely event they did so agree, could their actions be verified short of allowing inspectors to roam freely about the USSR.

Ratification of a SALT III treaty including limitations on CD might also present problems. Representative Mendel Davis (South Carolina) remarked rather pointedly in 1978 hearings, "Do you think it's right that we should discuss our. . . civil defense preparedness with the Soviet Union? I mean, why the hell should they have an input about our safety?"^{110/}

Nor do the American people have great enthusiasm for arms control agreements to discontinue civil defense. In the 1978 survey, 78 percent were opposed to unilaterally discontinuing civil defense, while 66 percent were opposed to a U.S.-Soviet agreement to discontinue all CD programs.^{111/}

In general, the public is favorable to almost all methods to reduce the risk of war by arms control or disarmament agreements, but also to civil defense programs to mitigate the impact of an attack if it should ever occur. The nation, that is, does not see arms control agreements as being at odds with prudent measures for civil defense--nor do those who have considered the issue.

Indeed, DCPA has advanced the view that far from being antithetical, CD and arms control are in at least a modest degree complementary and mutually supportive. It is obvious that if substantial reductions could be made in strategic nuclear arms, the problem of mitigating damage would be less formidable. In addition, civil defense capabilities could support arms control by providing a measure of insurance against the possibility of cheating on agreements relating to strategic offensive forces. There could be a little less perceived need for either side to react in haste, if it feared the other side were cheating. This view has not, however, found its way into official policies, although the FY 1980 Arms Control Impact Statement on civil defense concluded that the PD 41 policies, and an expanded U.S. program to protect population, are ". . . not inconsistent with U.S. arms control goals and policies."^{112/}

^{110/}Op. cit. supra note 43 at 13.

^{111/}Op. cit. supra note 31 at 107-108.

^{112/}Op. cit. supra note 80 at 93.

--SALT and Soviet Views on Assured Vulnerability

The press reports of scant Soviet enthusiasm for SALT limitations on civil defense appear quite credible in light of other indications of Soviet views. T.K. Jones testified in the November, 1976 Proxmire hearings that, based on three years' experience on the SALT delegation, he did not believe the Soviets would agree to any limitation on their civil defenses. He said they were not oriented to mutual destruction but to survival, and that they had been adamant against any limitations on their air defenses: "They said not only will they not even consider the subject, but please don't bring it up again."^{113/}

The views of Soviet leaders on civil defense have quite recently been reiterated straightforwardly and with candor. In a May 1978 interview with a West German newspaper, Brezhnev denied that Soviet civil defense had any strategic implications, but made it clear that the purpose of the program is to negate on the Soviet side the concept of mutual vulnerability, or of mutual assured destruction. He said in an interview that Soviet civil defense measures are "aimed at ensuring the safety of the peaceful population in case of war."^{114/}

This is a telescoped version of the frank justifications Soviet military leaders have repeatedly stressed for the civil defense program. In general, they have attempted to disguise neither the fact nor the importance of civil defense in the USSR. Their emphasis has been on its defensive purposes in protecting the population and economy against the ravages of a nuclear war, and they insist it has no effect on the strategic balance.

In February 1978 General Altunin, Chief of Civil Defense, spelled these views out in Red Star:

There has. . . been no end to the provocative fuss about civil defense measures being implemented in the USSR. . . . We cannot remain indifferent to the intrigues of imperialism's aggressive circles. When there is a fresh twist to the arms race spiral and the danger of war exists the Communist Party and the Soviet Government are obliged to show unremitting concern for strengthening the state's defense might and raising the combat readiness of the Soviet Armed Forces. As for USSR civil defense, it would be strange to deny that certain measures to improve it are being carried out. (Emphasis added.)

The main purpose of our civil defense is, together with the armed forces, to ensure the population's defense against

^{113/}Op. cit. supra note 34 at 42 (see too 46).

^{114/3} "Soviet World Outlook," Center for Advanced International Studies, University of Miami (May 15, 1978) at 3.

mass-destruction weapons and other means of attack from a likely opponent. By implementing defensive measures and thoroughly training the population, civil defense seeks to weaken as much as possible the destructive effects of modern weapons. . . .

We state unequivocally: By virtue of its specification the USSR's civil defense has never threatened anybody and threatens nobody, poses no danger for Western countries and moreover does not and cannot upset the "Soviet-American balance of forces."

Soviet civil defense . . . is an objective necessity engendered by the aggressive aspirations of imperialism. While the arms race and the preparation for a new world war continue we are obliged to strengthen our civil defense. Nothing, no heartrending cries from the ideologists of imperialism, no fabrications of the bourgeois propagandists, can distract us from resolving this important task of the state and of the whole people.^{115/}

Setting aside the ideological garnish, it is clear that assured vulnerability holds little attraction for General Altunin. His views appear those of the blunt and straightforward soldier, and do not extend to the more elegant, or at least more esoteric or recondite, theories that have been propounded and debated at length in the U.S.--the doctrine of mutual assured destruction, the relationship (or non-relationship) of CD to perceptions of the strategic balance, and the rest.

In the USSR, the tasks of national security management, and developing defense doctrine and strategy, are almost entirely in the hands of the professional military, who are also in charge of civil defense. To argue, for example, that security will result from a posture of mutual vulnerability is "at radical variance with all of the traditions and professional instincts of the Soviet defense establishment."^{116/} In the U.S., by contrast, such concepts as mutual assured destruction have been almost uniquely the product of civilian defense strategists.

The prospects for Soviet agreement to limit civil defense by treaty would not seem to be great.

^{115/}Ibid.

^{116/}Sienkiewicz, Stanley, "SALT and Soviet Nuclear Doctrine," 2 International Security 84 at 91 (Spring, 1978).

--"Dual-Use" Issues

The "dual-use" issue has been widely discussed, though rather more heat than light has been generated. As noted earlier, the 1972 Presidential decision on CD was that the program should be maintained at about its then-current level of effort (in fact, it has since declined by some 30 percent, in constant dollars), and that there should be "increased emphasis on dual-use. . . preparedness" for peacetime as well as attack emergencies. Notwithstanding this, OMB cut the FY 1977 budget request to about one-third of Secretary Rumsfeld's request, and under half the FY 1976 appropriation. This was on the basis that peacetime-disaster preparedness was a State and local, not Federal, responsibility.

The views and judgments of those in DCPA familiar with dual-use issues can be summarized as follows:

- (1) In general, the Federal view has been that attack preparedness is the primary objective of the CD program, with improved State and local readiness for peacetime emergencies being a secondary but desirable objective. (This was in fact DoD policy through FY 1976; it was of course reversed by OMB's direction for FY 1977.) The State and local view is in general the reverse--attack preparedness tends to be seen as the secondary but desirable objective.
- (2) State and local CD agencies are responsible for preparedness for peacetime emergencies, under their own legislation, whereas the Federal Civil Defense Act of 1950, as amended, defines CD solely in terms of attack preparedness operations. (A 1976 amendment relating to dual-use is discussed below.)
- (3) The historical record for two decades is conclusive that if the Federal Government wishes to develop attack readiness, it must provide full funding for the programs required. Examples include the procurement as well as the maintenance of radiological defense instruments, the shelter survey (started in 1962), development of local plans for the use of shelters, crisis relocation (evacuation) planning, and training.
- (4) Local governments, including CD directors, will however cooperate to the extent necessary to develop attack readiness in communities throughout the country, provided the Federal Government takes the lead and provides assistance on-site in attack-oriented planning, training, and related areas. This was clearly demonstrated in the

1960's (in FY's 1962-1967, annual Federal expenditures averaged over \$300M, in FY 1979 dollars, or about three times the current level).

- (5) The State and local view that attack preparedness is primarily (though not entirely) a Federal responsibility is clearly consistent with both the Constitution and the Federal Civil Defense Act.
- (6) State and local concern for peacetime preparedness has increased progressively since the latter 1960's, influenced primarily by the ever-decreasing Federal budget and patent lack of commitment to CD attack preparedness, also by the climate of détente. Increased concentration on peacetime disaster has been seen as essential to their survival, by local and State CD agencies, as well as having merit in its own right and being their legal responsibility. (Many of the State and local directors who are most emphatic on the need for peacetime-disaster readiness have never seen a reasonably serious, attack-oriented Federal program; for those who have, it is a fading memory.)
- (7) State and local concern for peacetime preparedness has advantages for attack-oriented preparedness, such as motivating State and local officials to commit some funds and effort to general emergency preparedness, in addition to the obvious desirability on the merits of saving life and property in a tornado or other peacetime disaster. Also, planning and training for peacetime emergencies has considerable benefit for attack readiness--as do local operations in an actual peacetime emergency. Civil defense, in short, both is and is seen to be "relevant," rather than a capability sitting on the shelf, waiting for a war that (it is hoped) will never happen.
- (8) Assets provided under the civil defense program have been of great value in peacetime emergencies: Emergency Operating Centers have been used to good effect on many occasions for direction and control of emergency operations, for example, in tornado or hurricane emergencies and in the recent Three Mile Island reactor incident. CD sirens are routinely used to warn the public of tornadoes. Radiological instruments and training provided for CD purposes have some applicability in peacetime radiological incidents.
- (9) Reasonable attack readiness cannot be developed as a bonus or by-product of readiness for peacetime emergencies. The latter type of preparedness gets a community perhaps 20

or 30 percent of the way to a reasonable level of attack readiness--which requires a large number of additional, special systems and capabilities (e.g., instruments and trained personnel for Radiological Defense; shelter surveys and plans for shelter use; plans for crisis evacuation; Emergency Operating Centers for key officials that are protected from attack effects).

- (10) Developing attack preparedness, however, cannot help but improve local and State readiness for peacetime emergencies, even if it were desired to avoid this (which of course it is not).
- (11) The modus vivendi that has evolved over the past two decades is in general that the Federal Government provides full funding for uniquely attack-oriented systems and capabilities (e.g., shelter surveys, Radiological Defense), while the capabilities supported by matching funds are for the most part "dual-use" in nature--necessary for both peacetime and attack emergencies (e.g., support of Local and State CD staffs, or local warning systems).
- (12) This modus vivendi works well in practice, notwithstanding the difference in Federal as contrasted to State and local priorities and concerns. However, it is essential that balance be maintained: Some local and State governments, if left to their own devices, will emphasize peacetime disaster readiness to the exclusion of attack preparedness. That is, their notion of "dual" use is not in fact dual.
- (13) The rhetoric, and to a degree, policy, of the Federal agency has varied^{117/} over the years: In the early 1960's, nearly total emphasis on attack preparedness, under the accelerated CD program of President Kennedy; mid- and latter 1960's, some recognition of peacetime preparedness; early to mid-1970's, stronger emphasis on peacetime preparedness, as a secondary but desirable objective; FY 1977, attack-only (per OMB direction); FY 1978-1979, significant emphasis again on peacetime preparedness but with attack preparedness being the primary objective.
- (14) DCPA (and earlier, OCD) guidance on emergency planning and related matters has quite consistently reflected the concept of peacetime-disaster readiness being a secondary but desirable objective. Currently, for example, DCPA is developing guidance for State and local governments on planning for nuclear reactor accidents, and DCPA has been active in this field since 1974, under the leadership of the Nuclear Regulatory Commission, the lead agency for reactor-safety matters.

^{117/}"Carried about with every wind of doctrine"? Ephesians 4:14.

- (15) Opinion in Congress has been to the effect that attack preparedness is the primary mission, under the Federal Civil Defense Act, but that assistance provided under the Act can be used in responding to actual peacetime disasters. In addition, funds provided under the Act can be used to prepare for peacetime disasters, provided this benefits both the attack and peacetime-preparedness missions.

A 1976 amendment to the Act, and accompanying Committee reports, reflected the foregoing.^{118/} However, the Congress has to date resisted efforts to change the definition of civil defense in the Act, to include peacetime as well as attack-caused emergencies, and it does not seem likely that such an amendment will be enacted. DCPA's view has been that such a change in the statutory definition could open the door to excessive diversion of funds and effort to peacetime disaster preparedness at the expense of attack readiness.

- (16) The view of most in DCPA is that "dual use" makes a great deal of sense provided the approach is used, not abused: balance is essential both in word and in deed (program administration). In principle, the current approach is optimum--providing Federal funds for attack preparedness, but allowing CD assets to be used in peacetime emergencies.
- (17) Many thus feel that FEMA would do well to stress attack preparedness while of course recognizing preparedness for peacetime disasters as a welcome bonus, and a significant and legitimate concern of States and localities. The latter can be relied on to add an ample tincture of emphasis on peacetime disaster readiness, so there is no compelling need for FEMA to stress peacetime preparedness at the expense (real or perceived) of attack readiness.

In sum, while "dual-use" is not a non-issue, it is quite clear that if an enhanced program, such as that approved by the Secretary of Defense for FY's 1980-1984, is in fact undertaken, dual-use will recede to its proper perspective: Preparedness for peacetime emergencies will be a "secondary but desirable objective"--desirable on a number of common-sense grounds including economy, dual-use of scarce resources, providing added motivation for participation by local and State governments, and increasing the effectiveness of local and State CD organizations. The expanded programs for attack preparedness will inescapably contribute as well to readiness for peacetime emergencies, and all concerned will likely be well content with the program in all of its aspects.

^{118/}Senate Armed Services hearings, FY 1979, Part 10, op. cit. supra note 40 at 7208-7209.

This type of dual-use approach is plainly laid down in Presidential Decision 41: The U.S. civil defense program will include planning for crisis evacuation but ". . . be adaptable [as well] to help deal with natural disasters and other peacetime emergencies."^{119/}

Should an enhanced program not be undertaken however, dual-use will likely remain a moderately active or indeed contentious issue. Local and State CD agencies will see the PD-41 policies as empty words,^{120/} in the absence of funds to give them substance, and few will be inclined to support with vigor whatever efforts FEMA may make towards attack preparedness. Should FEMA elect to give up any real pretense of developing attack preparedness, however, OMB might well repeat their FY 1977 initiative, and seek to kill the remnants of the program on the ground that readiness for peacetime disasters is not a Federal concern. This would eliminate the value a nominal civil defense program has as a point of departure for CD "mobilization" packages--to improve readiness in a period of about a year, as after an acute crisis that changed views markedly on the need for civil defense.

^{119/}Op. cit. supra note 48.

^{120/}"[A]s sounding brass, or a tinkling cymbal"? 1 Corinthians 13:1.

Arguments Against Civil Defense and
a Rebuttal

Some of the arguments made against civil defense were parodied as follows in a piece in the Harvard Crimson in 1962:

Recommendations by the Committee for a Sane Navigational Policy:

It has been brought to our attention that certain elements among the passengers and crew favor the installation of lifeboats on this ship. These elements have advanced the excuse that such action would save lives in the event of a maritime disaster such as the ship striking an iceberg. Although we share their concern, we remain unalterably opposed to any consideration of their course of action for the following reasons:

1. This program would lull you into a false sense of security.
2. It would cause undue alarm and destroy your desire to continue your voyage in this ship.
3. It demonstrates a lack of faith in our Captain.
4. The apparent security which lifeboats offer will make our navigators reckless.
5. These proposals will distract our attention from more important things, e.g., building unsinkable ships. They may even lead our builders to false economies and the building of ships which are actually unsafe.
6. In the event of being struck by an iceberg (we will never strike first) the lifeboats would certainly sink along with the ship.
7. If they do not sink, you will only be saved for a worse fate, inevitable death on the open sea.
8. If you should be washed ashore on a desert island, you could not adapt to the hostile environment and would surely die of exposure.
9. If you should be rescued by a passing vessel, you would spend a life of remorse mourning your lost loved ones.
10. The panic caused by a collision with an iceberg would destroy all semblance of civilized human behavior. We shudder at the prospect of one man shooting another for the possession of a lifeboat.
11. Such a catastrophe is too horrible to contemplate. Anyone who does contemplate it obviously advocates it.